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ABSTRACT

The impact of school desegregation policy on community voting patterns and white flight in northern school districts is analyzed. Both voting behavior and white flight are considered two indicators of the success of school desegregation in achieving community social integration. School board elections, school tax referenda voting trends, and school racial composition data in the northern school districts over a 10-year period are examined. The results indicate that school desegregation increases voter turnout and dissent voting. While the increase in school board election turnout appears to be fairly permanent, the increase in dissent voting is only temporary. Therefore, in many communities school desegregation has more socially integrative characteristics than disintegrative with regard to voting behavior. In 86 northern school districts, school desegregation has little or no effect on white flight, as measured by the change in percentage of white students enrolled in public schools. Even in the two high desegregating school districts, white flight is minimal and temporary. While one cannot conclude that school desegregation has increased social integration by the third year after a major desegregation plan, the opposite conclusion is not warranted either. (Author/DE)

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THE POLITICAL AND SOCIAL IMPACT OF SCHOOL DESEGREGATION POLICY: A PRELIMINARY REPORT

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*This paper is the first report of a larger study of 113 northern and southern school districts funded by the National Institute of Education. The analysis of community voting patterns was completed while the author was a Research Associate at the Bureau of Governmental Research, University of Maryland, College Park. Computer time for that part of the paper was provided by the University of Maryland Computer Science Center. Steve Cohen of Boston University adapted the quasi-experimental computer program to the IBM 360 and completed all the computer runs for the analysis of "white flight."

THE POLITICAL AND SOCIAL IMPACT OF SCHOOL DESEGREGATION POLICY: A PRELIMINARY REPORT

This paper analyzes the impact of school desegregation policy on community voting patterns and white flight in a sample of northern school districts as part of a larger study of the impact of school desegregation in 113 northern and southern school districts. Both voting behavior and white flight are analyzed as two indicators of the success of school desegregation in achieving community social integration.

The methodology used here is the quasi-experimental time series analysis, and a time series of cross-sectional multiple regression equations, analyzing school board election and school tax referenda voting data and school racial composition data over a ten year period from 1963-73. The data show, first, that school desegregation increases voting turnout and dissent voting. However, the relationship is clearest and most consistent for school board elections, and less clear in tax referenda. When educational level is controlled for, school districts with a high educational level have the highest turnout and those with a low educational level have the highest dissent voting in response to school desegregation. While the increase in school board election turnout seems to be fairly permenent, the increase in dissent voting is only temporary. Therefore, there is the possibility that in many communities (especially those of high educational level), school desegregation has more socially integrative characteristics than disintegrative with regard to voting behavior.

Secondly, the data show that in 86 northern school districts, school desegregation has little or no effect on white flight, as measured by the change in percentage white enrolled in public schools. Even in the two high desegregating school districts that had significant white flight, it is minimal (e.g. about a 3% increase over the previous trend) and temporary. White flight stabilizes to a rate lower than the pre-desegregation period by the third year after desegregation in the only two districts that showed any significant change. Desegregating under court order does not increase white flight, nor does massive desegregation in large school districts. These data show that all three assertions Coleman has recently made regarding the deleterious effect of school desegregation on white flight are wrong. The actual data are presented here in Table 10 and Appendix 1 in order to minimize any suspicion of misinterpretation that tends to arise in discussing controversial social policies.

THE POLITICAL AND SOCIAL IMPACT OF SCHOOL DESEGREGATION POLICY: A PRELIMINARY REPORT

The major explicit goal of school desegregation has always been to provide equal educational opportunity for minority children. Consequently, evaluation research has tended to confine itself to analyzing educational inputs (e.g. school resources, racial mixtures, educational programs) and educational outputs (e.g achievement scores, school years completed, etc.). There is evidence, however, that an underlying, and perhaps equally important goal of school desegregation is social integration. This goal is premised on the belief that when children of different races go to school together, they grow to like and respect each other, and eventually this results in a socially integrated society.

However, the evaluation of school desegregation in its progress toward social integration must include the community, as well as the classroom, in order to assess the full complexity of the process. This is necessary for two reasons. First, school desegregation is a policy whose target is children, and because most children have little self-determination, the behavior and attitudes of their parents who reside in the larger community is of critical importance. Secondly, school desegregation is implemented in a specific, geographically circumscribed political entity: the school district. As long as this is the case, parents can reject the policy and any social change it may bring by politically eliminating the local decision-makers or by moving to another community. Thus it is

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critical to understand the reaction of citizens in a community as a predictor of the degree to which the policy will achieve its goal of social integration.

The concept of social integration is, of course, quite complex and has a large set of operational forms, each covering different interactions. Rossi distinguishes several broad types of interactions: sociability interactions involving exchange among residents in the form of friendship ties, visiting relationships, informal talks, etc.; political interactions involving the exchange of support (including votes) and benefits in the process of wielding legitimate political authority; and economic interactions involving the exchange of goods and services using money as the medium of exchange.[1] This paper focuses on the second category, political interactions, in analyzing the exchange of support in terms of votes and participation in the plan. The latter is measured by the percentage of whites in public schools before and after the school desegregation plan.

In other terms, this research analyzes the "spillover effect" of school desegregation on aggregate community voting patterns and white participation in the school desegregation plan, as two indicators of the achievement of social integration in a community. This is the first part of a study in which eight indicators of social integration were chosen to measure the social and political impact of school desegregation over a ten year period from 1963 through 1973. The first step in choosing indicators was to divide a hypothetical community into three components: the school, the neighborhood or community,

and the school district, in order to illustrate the "spillover" effect of the policy. Although school desegregation is implemented in the school, this is not necessarily the first area of the community exhibiting change. The indicators are summarized below:

SCHOOL DISTRICT

Voting Behavior (School Board Elections and School Tax Referenda)

Racial Composition of the School Board

NEIGHBORHOOD-COMMUNITY

White Flight (Percentage White Adults)
Residential Integration
Community Organizational Participation

SCHOOL

Percentage White in Public Schools (white flight)
Absences (ADA), Suspensions, Expulsions
Racial Composition and Integration of Teachers
Racial Integration of Student Organizations and Athletic Teams

These indicators have been collected and analyzed in a quasi-experimental fashion. Typically, political scientists have made little use of experimental research designs. LaPonce notes that in the 1969 issues of the American Political Science Review the most popular data acquisition technique was the questionnaire survey. The experiment, by contrast, accounted for only 3.2 percent of the empirical-quantitative articles.[2] Coleman, in a recent analysis of school integration and white flight failed to set his data up in quasi-experimental fashion despite the fact that it was collected for a five year period.[3] It is clear, however, that cross-sectional analysis or simple longitudinal analysis cannot substitute for experimental or quasi-experimental

analysis. Hovland has demonstrated how survey research and experimental research produce conflicting results in studies of attitudinal change.[4] Wilson and Zeigler, using Montecarlo simulation, have found cross-sectional correlations to be either inflated or deflated when there are varying degrees of trend across units of analysis.[5] The most serious limitation of the cross-sectional design is that it does not permit assertions of temporal causality or assessments of pattern changes over time. Simple longitudinal analysis, on the other hand, obscures the distinction between secular trends and impacts occurring as the result of the implementation of a distinct governmental policy. In no area of political analysis are these limitations more serious than in the study of public policy impacts, as the misleading findings of Coleman's recent work illustrate.

Two types of quasi-experiments will be performed in this paper: (1) the interrupted multiple time series quasi-experiment with a nonequivalent control group, developed by Campbell and Stanley,[6] and (2) a time series of cross-sectional multiple regression equations computed to measure relationships before and after the "treatment." They are put under the same "quasi-experimental" label because both at least partially fulfill the three prominent characteristics of quasi-experimental designs. They both attempt to approximate or simulate manipulation by setting up the data into a "before" and "after" series, to provide controls for confounding variables, and to probe the data for causal dependencies. The purpose of this paper will be to clarify this methodology, as well as to analyze the impact of school desegregation on community voting patterns and white flight.

Political Mobilization

The first "spillover effect" dealt with here, is that of political mobilization. It is hypothesized that school desegregation will cause an increase in voter turnout in school board elections and school tax referenda after the decision. Normally these two types of school elections are low salience elections even when they appear on the same ballot as city and state elections.[7] However, school desegregation, like a lot of controversial policies, tends to politically mobilize the electorate, thus increasing turnout. This mobilization is accomplished through public debate and demonstrations. Opposing group leaders often appear on local television to argue their case, and the local newspaper usually accords the issue front page status. In many communities, school desegregation is the most well known and important policy decision ever considered by the school system, or any local agency for that matter. Therefore, school elections which once went unnoticed should experience a dramatic increase in voting participation. This increase will be greatest after the implementation because the debate becomes more intense, the closer the actual policy implementation comes. Indeed, Kirby, Harris, and Crain go so far as to say that "the degree of white opposition is mainly the result of the degree of desegregation which has taken place in the community. White resistance seems to come after the fact. By the time citizens have rallied to protest a decision, the die is cast."[8]

It is further hypothesized that this political mobilization will vary positively in relation to the level of policy output. A small token school

desegregation program should have less of an effect than a massive busing program because the latter will disrupt more students' normal school assignments and hence mobilize more of their parents. Therefore, the greater the degree of school desegregation implemented, the greater the degree of political mobilization.

Furthermore, although there has been some contradictory evidence, at least one group of researchers has maintained that high social status communities are more likely to be mobilized in response to community controversy.[9] Crain and Rosenthal argue that high status communities are characterized by higher levels of participation, and more issue oriented political campaigns.[10] It is thus hypothesized that the greatest amount of political mobilization in response to school desegregation will take place in higher status school districts.

The meaning of political mobilization as an indicator of social integration is not clear when it is analyzed by itself. Because voter participation in the U.S. has been relatively low in the last century relative to other western nations, the "Panglossian" theorists of contemporary social science have argued that, the U.S. being the best of all possible worlds, low voter turnout is the best of all possible characteristics. Seymour Martin Lipset for example, maintains that "nonvoting is now at least in Western democracies a reflection of the stability of the system, a response to the decline of major social conflicts."[11] That low voting turnout might also be a reflection of a lack of social integration--e.g.,

the virtual disenfranchisement of southern blacks until the latter half of the sixties, or evidence of a general apathy toward a political system that offers no real choices, seems to have been soundly rejected.[12] Whether high voter turnout in response to school desegregation is an indicator of increased or decreased social integration will have to be considered later in terms of the specific characteristics of the increase in mobilization.

Political Opposition

Orbell and Uno's theory of neighborhood problem-solving[13] is useful in analyzing the behavior of citizens faced with a controversial, social change policy such as school desegregation. Citizens faced with school desegregation have three options. First, they can do nothing and remain "loyal" to their neighborhood or community. They may feel that the decision does not affect them if they are elderly, or childless; or they may feel there is nothing they can do about it. This response by itself, will not increase social integration in a community. On the other hand, it probably will not decrease social integration unless it is characterized by formerly participative, involved citizens becoming apathetic in the face of what is more and more coming to be seen nationally as an extremely unpopular policy.[14]

Second, citizens can "exit" from their community. Orbell and Uno believe this response to be the most frequently used alternative. Furthermore, they suggest that those citizens most likely to move from a neighborhood are those who possess the greatest social resources (e.g., wealth,

education) that could be brought to bear on community problems.[15] Those citizens who would exit in response to school desegregation would probably be white. Clearly, exiting is an option that decreases social integration and if great enough can completely subvert the policy by destroying the school district racial composition upon which the plan was predicated.

The final option available to citizens of communities that have experienced school desegregation is to use "voice" in attempting to lessen any anticipated negative effects or increase any anticipated positive effects. The most costly form of voice is the forming of citizen groups in order to reach a compromise with or obtain a policy change from the school board, or school administration. Because the costs of such an organizing effort are great and the returns unsure, this option will only be taken by a minority of citizens. The degree to which such efforts increase or decrease social integration will depend on their purpose and the extent of overlapping membership.

The least costly form of voice available to residents is the vote. An underlying assumption of this study is that the vote will be the most frequently used form of voice selected by citizens for expressing their dissatisfaction with a school desegregation decision. The vote will be a frequently adopted option because of its low cost compared to exit or group formation, and because of its availability.

The ways in which citizens can vote in order to demonstrate their opposition to school desegregation are listed below in the order of their efficaciousness.

1. Voting incumbents out of office before school desegregation is implemented, but after the decision has been made.
2. Voting incumbents out of office after school desegregation is implemented.
3. Defeating school finance referenda before school desegregation is implemented, but after the decision is made.
4. Defeating school finance referenda after school desegregation is implemented.

Option 1 is the most efficacious means of expressing dissatisfaction with a school desegregation policy because, on occasion, it can prevent implementation (e.g., the Detroit recall election, 1970).[16] Option 2 is the next most efficacious way to demonstrate opposition, because it can cause the rescinding of the original desegregation plan (e.g., Rochester, N.Y., 1971). Defeating a school finance referendum (options 3 and 4) does not seem to have any effect on either preventing implemenation of a plan or rescinding a plan, although it may alter the specific characteristics of a plan (e.g., whether old schools are torn down and new ones built). There seems to be some evidence, however, that community referenda voting patterns are not necessarily related to the issue itself. It has been argued that many citizens express general grievances and feelings of alienation in referenda. Therefore, although voting against school finance referenda

may not be efficacious in preventing or rescinding a desegregation plan, it is assumed that voters will use referenda to indicate their feelings regarding school policy.

Although option 1 is the most efficacious means of voting in opposition to school desegregation, it is less likely to be used (as is option 3) than option 2 and 4 because it requires a good deal of organization, and the fortuitiveness of having a board election (or finance referenda as in option 3) after the decision is made, but before it is implemented. Therefore, it is assumed that any opposition to school desegregation will be reflected in voting patterns after the policy is implemented.

It is a supposition of this study that increased dissent voting after school desegregation is an indication of a decrease in social integration. Whether it occurs in school board elections or school tax referenda, it means a decline in support for school policy and probably legitimacy for school authorities in general. Furthermore, unless all eligible voters are voting in opposition to the policy, increased dissent voting indicates increased conflict and a sharpening of cleavages between those who voted "yes" and those who switched their support to opposition.

This opposition may be related to characteristics of the plan. For example, mandatory busing results in the highest percentage of both black and white students reassigned.[17] Usually this also involves some redrawing of boundaries. Voluntary busing, on the other hand, never involves more than a few percentage of students being reassigned. As a result, the higher

the level of school desegregation output, the more it will involve mandatory busing. However, as a 1973 Gallup Poll indicated, only nine percent of the blacks and four percent of the whites who were even in favor of school integration, picked mandatory busing as the best way. Therefore, it is hypothesized that the higher the level of policy output (percentage of students reassigned), the higher the level of political opposition in elections.

Crain and Rosenthal's study of policy adoptions and local referenda outcomes found that higher status communities were more likely to have issue orientation, high levels of debate during a campaign, and hence higher negative voting, particularly when the campaign was associated with a controversial policy adoption.[18] Therefore, it is hypothesized in this study that higher status school districts will have a higher level of incumbents defeated after school desegregation than lower status districts. This is not necessarily because there will be more opposition to the policy, but because the electoral phenomena found in high status communities--issue orientation, publicity, controversy, and public debate--will make it clear to voters that the way to express dissatisfaction with school desegregation is to defeat the incumbent school board members, rather than finance referenda on some other school issue.

The one exception to Crain and Rosenthal's findings regarding referenda defeats was that school finance referenda were less likely to be defeated in higher status school districts.[19] Part of the reason for this is that higher status individuals are more supportive of the school system

in general.[20] In addition, it is argued here that dissatisfaction with school policy in higher status districts will take more goal specific forms than defeating tax referenda, which may damage the school system, but rarely results in specific policy changes. In low status districts, on the other hand, the lack of issue orientation in school board campaigns, the relatively low level of support for the school system generally, the critical importance of finances and increasing burden of education will combine to increase tax referenda as the target and decrease the school board. Thus it is hypothesized that school tax referenda dissent voting after school desegregation will be greater in low status school districts than in higher status districts.

The hypotheses discussed above are summarized below.

1. There will be an increase in voter turnout in response to school desegregation.

   Corollaries

   a. A higher level of school desegregation policy output will cause a higher level of voter turnout.

   b. The higher the status of the school district, the greater will be the voter turnout in response to school desegregation.

2. There will be an increase in dissent voting in response to school desegregation.

   Corollaries

   a. A higher level of school desegregation policy output will cause a higher level of dissent voting.

   b. The higher the status of the school district, the greater will be dissent voting in school board elections, but the lower it will be in school tax referenda.

The findings regarding these hypotheses will then be assessed in terms of their contribution to community social integration.

Rival hypotheses which might invalidate any findings are summarized below.

1. Change patterns found in the election data are due to random instabilities in the election variables.

2. Change patterns found in the election data are part of either or both short-term or long-term systematic trends that have no causal relationship to school desegregation implementation.

3. Changes in election patterns "explained" by the occurrence of school desegregation can be equally well explained by the occurrence of other variables/events not included in the system description.

4. Changes in election patterns over time are due to changes in measurement and/or scoring procedures that are irrelevant to the implementation of school desegregation.

5. Changes in election patterns "explained" by the implementation of school desegregation are due solely to maturation differences in comparison groups resulting from characteristics that originally caused them to select a given level of school desegregation.

The controls for these rival hypotheses will be discussed later when the methodology of the quasi-experiment is explained, and the findings are discussed.

DESIGN

Sample and Data Collection

The data used in this analysis is aggregate data describing a sample of 70 northern cities and their school districts. The sample is taken from a study of 91 cities chosen from the National Opinion Research Center's

Permanent Community Sample of 200 cities.[21] The 91 cities were selected if they had at least 3,000 blacks (insuring issue salience) and were outside of the South or eliminated de jure segregation immediately after the 1954 Supreme Court decision, Brown v. the Board of Education, thus facing the northern problem of de facto segregation. Because the research reported here is a study of the impact of a policy decision on voting patterns, cities that had neither elected school boards nor financial referenda, or in which there were data collection problems, were eliminated from this study. The resulting sample of 70 cities is further reduced due to the necessities of the quasi-experimental design and varies from 15 to 39 at each point in time depending on the election variable being examined. The final sample is biased in favor of medium and large cities/school districts.[22]

Within each one of these city/school districts, NORC trained interviewers administered a series of 18 interviews in 1968 with selected school system personnel, politicians, civil rights leaders, civic leaders, and city officials who served as expert informants on the politics of their city and their school district. School desegregation data, 1970 Census data, civil rights activity data, and school election data collected for the period, 1963 through the 1971-72 school year, were added to this.

This study departs from previous studies of school desegregation by using a quanitative measure of the proportion of black and white students reassigned for the purposes of school integration.[23] The data for the measure was collected by means of a mail questionnaire which listed the

bi-racial schools (defined as a minimum of 10 percent black and 10 percent white)[24] in a district and asked administrators to indicate the reason for their bi-racialness and the approximate date of any action claimed.[25] The measures of school desegregation policy were computed as follows: the number of black and white students in a school in the year in which an action was claimed was subtracted from the number in the school in the preceding year. The difference was attributed to administrative action if it increased racial integration in the receiving school. The number of black and white students so reassigned was totaled for the school district and then standardized by dividing by the school population of each race to obtain the percentage of black students reassigned and the percentage of white students "reverse integrated" (sent to predominantly black or formerly black schools). These figures were added together to comprise an index measuring school desegregation for each year from 1963-64 through 1971-72.[26]

Further policy classification was unnecessary because the percentage of black and white students reassigned proved to be highly related to the type of action taken as indicated earlier. Mandatory busing results in the highest percentage of students reassigned, while voluntary busing never amounts to more than a few percentage of students reassigned. Furthermore, a straightforward quantitative measure avoids the problems of semantics encountered with inflammatory policy issues.

In constructing the election variables, a serious problem was presented by the fact that school elections are not always held concurrently with the same types of city or state elections even within the same city. Only 10 school systems in this study held special elections (only school offices and issues on the ballot) consistently during the entire period. The vast majority held them on the same ballot as city primaries or city general elections, although this varies from year to year. Typically this problem is resolved in local voting analysis by analyzing only those with similar concurrent elections or no concurrent elections (special elections). Because this study builds on a previous study and thus utilizes a pre-selected sample, the sample characteristics and size were restricted from the start. To analyze only those with similar election processes from the original sample would have reduced it to an unacceptable size. As it is, the N for each variable in each yearly time period ranges from 15 to 39 with a mean of 23 due to missing data or not holding an election.[27]

The problem of dissimilar concurrent elections was solved by grouping the voter turnout variables according to four categories: held as a special school election; concurrent with a city primary; concurrent with a city general election; and concurrent with a state or national election, and then weighting them in relation to the mean turnout in the category with the highest mean turnout.[28]

Four variables were constructed to measure the impact of school desegregation on voting patterns. The first two variables measure political

mobilization: voter turnout in school board elections and voter turnout in school tax referenda (as a percentage of registered voters.) The second two variables measure political opposition or dissent: the percentage of incumbents defeated in school board elections and the percentage of "no" votes in school tax referenda.

Methodology

Campbell and his colleagues have assembled a number of quasi-experimental designs in which random assignment to treatment groups is not possible; and/or where the independent variable is "socially given" and not under experimental control.[29] The first design used here--the interrupted multiple time series with a nonequivalent control group--is from those they have assembled. This is characterized by (1) periodic measurements on some variable obtained at equally spaced points in time, (2) the "introduction" of a quasi-experimental variable somewhere into the series, (3) the assumption that the introduced variable occurs "exactly" between two selected measurement points, and (4) a control group which has not received the treatment against which the treatment groups can be compared.

Whereas design 1 is a bi-variate analysis of the change in election variables over time, the second design used in this study is a comparison of the strength of the relationship between school desegregation and the election variables, controlling for other political and social variables, at several points before and after the major school desegregation plan. This

is represented by a series of multiple regression equations for each year before the major desegregation plan and each year after. Equations are then compared for changes in the standardized regression coefficients.

Because this study is comparative and school desegregation occurs at different times for different school districts, two modifications had to be made in the quasi-experimental time series designs. The first modification was in regard to the "treatment" point. Unfortunately for the neatness of the design some school districts take two and occasionally three years to complete their desegregation plans. However, one year's action is usually much larger than any of the others and that was the point chosen for those taking multiple actions. Table 1 shows the degree of bias introduced by this lack of a single treatment. The major desegregation plan is represented in the fifth column of the table, and the other columns indicate any other actions taken before or after their major plan by the school districts that desegregated. The major desegregation plan is dramatically larger in terms of the percentage of black and white students reassigned and the number taking actions than any desegregation occurring before or after that. Thus the impact of school desegregation will probably be only slightly muted by those cases that lack a single treatment.

Change is then analyzed for four years before and three years after the major desegregation plan, although for some school districts this will mean the first point in the series is 1963 and for others it is 1967. However, most school districts desegregated in 1968, with the next largest

Table 1

Average School Desegregation and Number of Cases Desegregating in Each Election Variable Sub-Sample in Each School Year Before and After the Major School Desegregation Plan

Election Variable Sub-Samples		Percentage of Black and White Students Reassigned				Major Desegregation Plan			
		-3 - 4 Years	-2 - 3 Years	-1 - 2 Years	-0 - 1 Year		+0 - 1 Years	+1 - 2 Years	+2 - 3 Years
School Board Election Turnout Sub-Sample	$\bar{X}$	.53	.66	.53	.91		15.59	.54	.41
	N	(2)	(6)	(3)	(7)		(22)	(5)	(5)
School Tax Referenda Turnout Sub-Sample	$\bar{X}$	.00	.03	.02	.66		13.96	.76	.38
	N	(0)	(1)	(1)	(3)		(14)	(3)	(3)
School Board Election Dissent Sub-Sample	$\bar{X}$	.42	.31	.54	1.00		6.65	.81	.41
	N	(1)	(3)	(3)	(5)		(16)	(6)	(3)
School Tax Referenda Dissent Sub-Sample	$\bar{X}$	.00	.03	.02	.66		13.96	.68	.35
	N	(0)	(1)	(1)	(3)		(14)	(3)	(3)

groups desegregating in 1969, and 1970. For the control group, those that did not desegregate at all, 1968 is used as the "treatment" point because it is the year in which the largest number desegregated, and it is a year in which a good deal of disruption and change occurred in this country. Therefore, 1968 marks a turning point used to isolate possible short-term or long-term systematic trends.

The second modification of the time series design was in regard to the dependent election variables, again, because this is a comparative study. School districts hold elections at different times within a school year, and some hold more than one in a year. Therefore, the criteria of equal spaced intervals is violated at the case level, although theoretically upheld at the group level since mean scores are used to represent a one school year period. In addition, school board elections are typically held every other year, and school tax referenda sporadically. Therefore, the rule that a case is always being compared to itself at each point in time is also being violated.[30] This is one of the reasons why two designs are used.

In general, the second design, using multiple regression equations computed before and after school desegregation, serves as a supplement to the interrupted time series design. First, it compensates for the fact that several potentially important assumptions of the interrupted time series are violated in this particular study because of the nature of the data--elections occurring at irregular intervals and the lack of a "one-time only" treatment. Secondly, it attempts to control for the problem

of multiple influences on the election variables and thus aids in developing theory. Thirdly, it will give us a measure of the strength of association between school desegregation and the election data at different points in time. This benefits the study because the interrupted time series design is limited to tests of significance and visual inspection in assessing the strength of the relationship between an event and the dependent variables.

The rival hypotheses considered earlier can be controlled for by the use of the two quasi-experimental designs. Each rival hypothesis will be considered in assessing the validity of any observed effect. However, if rival hypothesis 1 (that observed changes could have occurred by chance) is upheld by tests of signficance, there is usually no need to consider other rival hypotheses.

Measuring Discontinuity: Tests of Significance

The question of whether the occurrence of an event under study had an effect on the variables being measured cannot be solved simply by visual inspection of plots of data. A test of significance must be applied to estimate whether or not an observed change exceeds the limits of what is expected on the basis of chance fluctuations.

Two tests of significance, the single-Mood and double-Mood tests, are used in the interrupted time series (design 1). Each of these tests is based on a calculation of the difference between expected and observed values of points or distributions (or expected and expected values in the case of the double-Mood test), where expected values are based on an

extrapolation of the regression line.[31]

The first test, the single-Mood test,[32] is a t-test using a simple least-squares line fitting technique where the slope of the line is used to "predict" the first value occurring after the quasi-experiment. The standard error is based on pre-test variance only. The single-Mood test is appropriate for testing hypotheses regarding the immediate effect of an event.

The double-Mood test extends the logic of the single-Mood test to include both a pre-change linear fit as well as a post-change linear fit.[33] The comparison is between the two predictions by these two estimates of a hypothetical value lying midway between the last pre-change and the first post-change point. The standard error is based on the entire series variance.[34]

FINDINGS

Political Mobilization: Results of the Interrupted Time Series

Three hypotheses are to be tested in this section. The first is the hypothesis that school desegregation will politically mobilize communities, and that this will manifest itself in increased turnout in elections. Secondly, it is hypothesized that the greater the degree of school desegregation policy output, the higher the turnout will be in response to it. Lastly, it was hypothesized that the higher the social status of a school district, the higher the voter turnout in response to the major desegregation plan.

The top half of Figure 1 shows the time series pattern when all the districts that desegregated are combined into one group and compared with

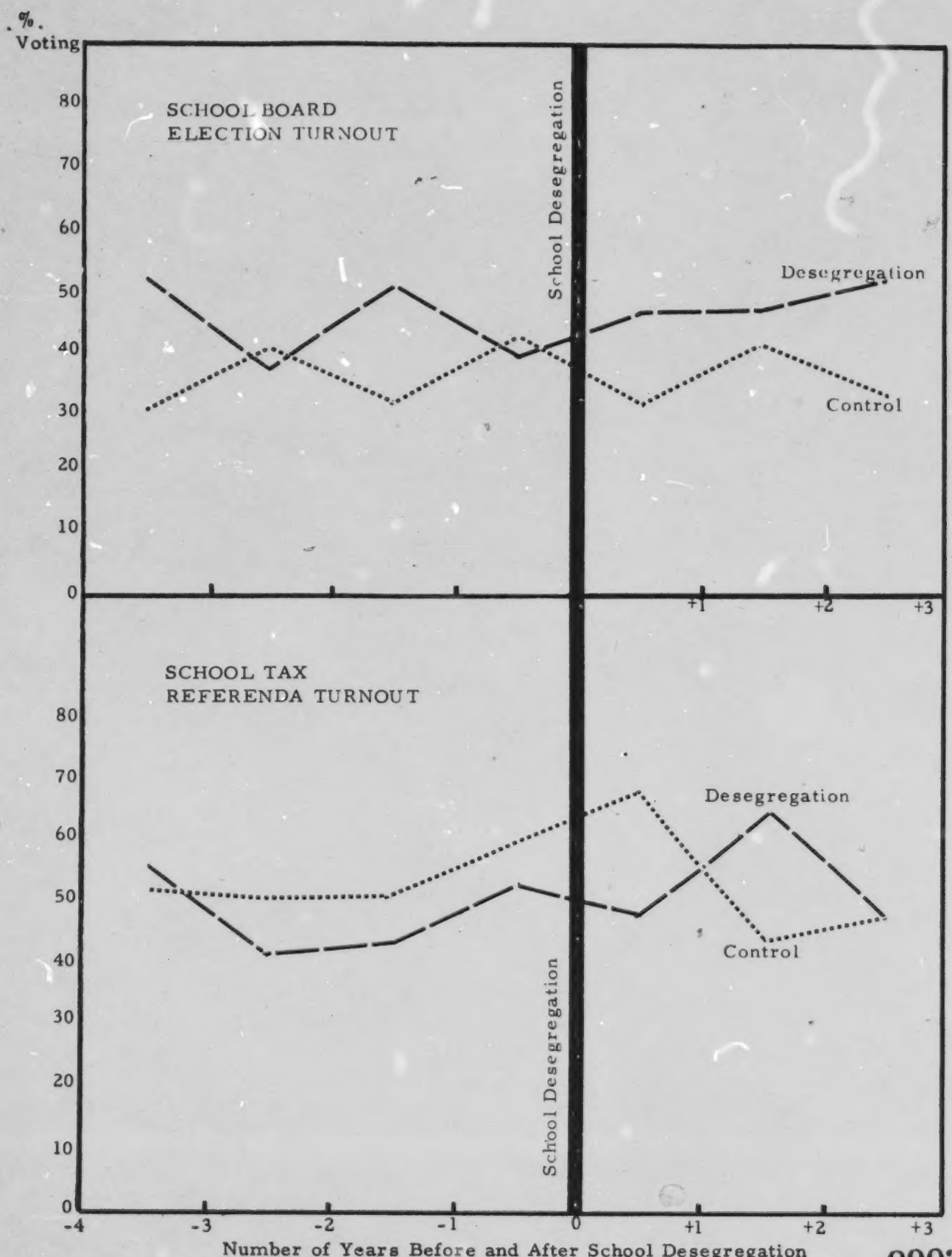

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Figure 1 : School Board Election Turnout and School Tax Referenda Turnout for Two Groups: All Desegregating School Districts and a Control Group

the control group (those that implemented no desegregation). Visual inspection indicates that the earlier cyclical pattern has been disrupted by the implementation of school desegregation, causing an increasing level of turnout. That this is not part of a systematic trend is partially substantiated by the continuing cyclical pattern of the control group.

Is this a real effect? This can be answered in part by turning to each of the rival hypotheses. Rival hypothesis 1--that voting pattern changes are due to random fluctuations--invalidates the hypothesis that the change in the cyclical pattern is a result of the implementation of school desegregation (thus further rival hypotheses do not have to be considered). The single-Mood test for "All Desegregating Groups" in Table 2 is .8, indicating that the first post-desegregation value could have occurred by chance. The double-Mood test in the last column of Table 2 estimates whether the entire series of post-desegregation values is significantly different from the pre-desegregation series of values. The value of .4 is not significant. There is, however, a slope change from -2.7 to +3.3 with the advent of desegregation while the slope of the control group seems to have declined to a less positive slope. Although none of the tests are significant, the "visual test" makes it hard to completely refute the hypothesis that school desegregation has increased school board election turnout.[35]

The bottom half of Figure 1 shows the time series quasi-experiment for school tax referenda before and after school desegregation. It also does

TABLE 2

The Effect of School Desegregation on
Political Mobilization in School Board Elections

	Slope		Intercept		Single-Mood (DF2)	Double-Mood (DF3)
	Pre	Post	Pre	Post		
All Desegregating Groups	-2.7	3.3	51.1	28.6	.8	.4
High Desegregation	4.7	15.8	33.6	-35.4	.4	.7
Med. Desegregation	-4.7	2.9	49.1	29.8	1.5	1.1
Low Desegregation	-1.4	1.6	47.2	35.8	.6	.3
Control Group	2.3	.7	30.7	30.8	1.6	.7

not indicate any clear pattern. At only one point after desegregation does the experimental group have a higher turnout than the control group and that could have occurred by chance. Neither the single-Mood test of the first point after desegregation nor the double-Mood test of the change in the entire series show any significant change for "All Desegregating Groups" in Table 3. Thus, the plausible rival hypothesis that voting pattern changes are due to random fluctuations invalidates the hypothesis that school desegregation increases the level of turnout in school tax referenda.

In order to test the second hypothesis that a higher level of policy output is positively related to a higher level of turnout. The sample of desegregating school districts was divided into a high desegregation group (10.82 to 98.48 percent of the black and white students reassigned), a medium desegregation group (5.78 to 10.82 percent reassigned) and a low desegregation group (.01 to 5.78 percent reassigned). In doing so, the analysis incorporates some of the problems found in cross-tabulations--the choice of cut-off points interacting with within-group variation distorts the relationship found in the continuous variable.

The data for school board elections is presented in Figure 2, and for school tax referenda in Figure 3. Neither election pattern is clear, although the school board election pattern is closer to what was hypothesized. Furthermore, the t-test values for school board election change are not significant for the high desegregation group or even for the medium desegregation group in Table 2. The same lack of significant change can be seen in Table 3 for

TABLE 3

The Effect of School Desegregation on Political Mobilization in School Tax Referenda

	Slope		Intercept		Single-Mood (df=2)	Double-Mood (df=3)
	Pre	Post	Pre	Post		
All Desegregating Groups	-.6	-.6	50.3	57.2	.09	.39
High Desegregation Group	5.3	-20.4	23.7	161.4	.15	.72
Medium Desegregation Group	-2.9	17.3	51.7	-44.6	.20	.1
Low Desegregation Group	-1.8	3.4	62.1	40.9	.14	.14
Control Group	2.7	-10.7	47.2	116.9	1.70	.83

[a]Significant at .10 or better

[b]Significant at .15 or better

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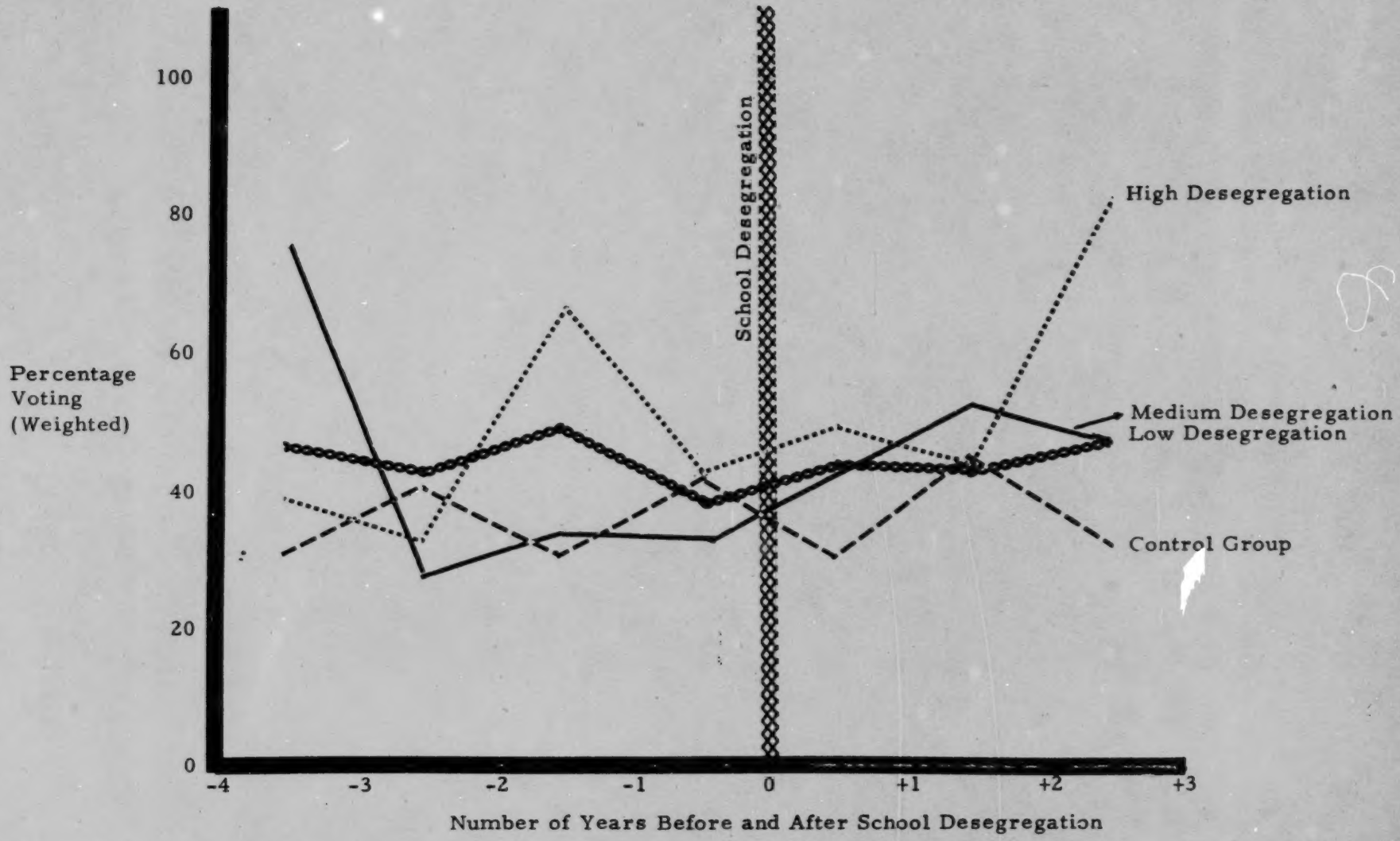

FIGURE 2: Voting Turnout in School Board Elections for Experimental and Control Groups

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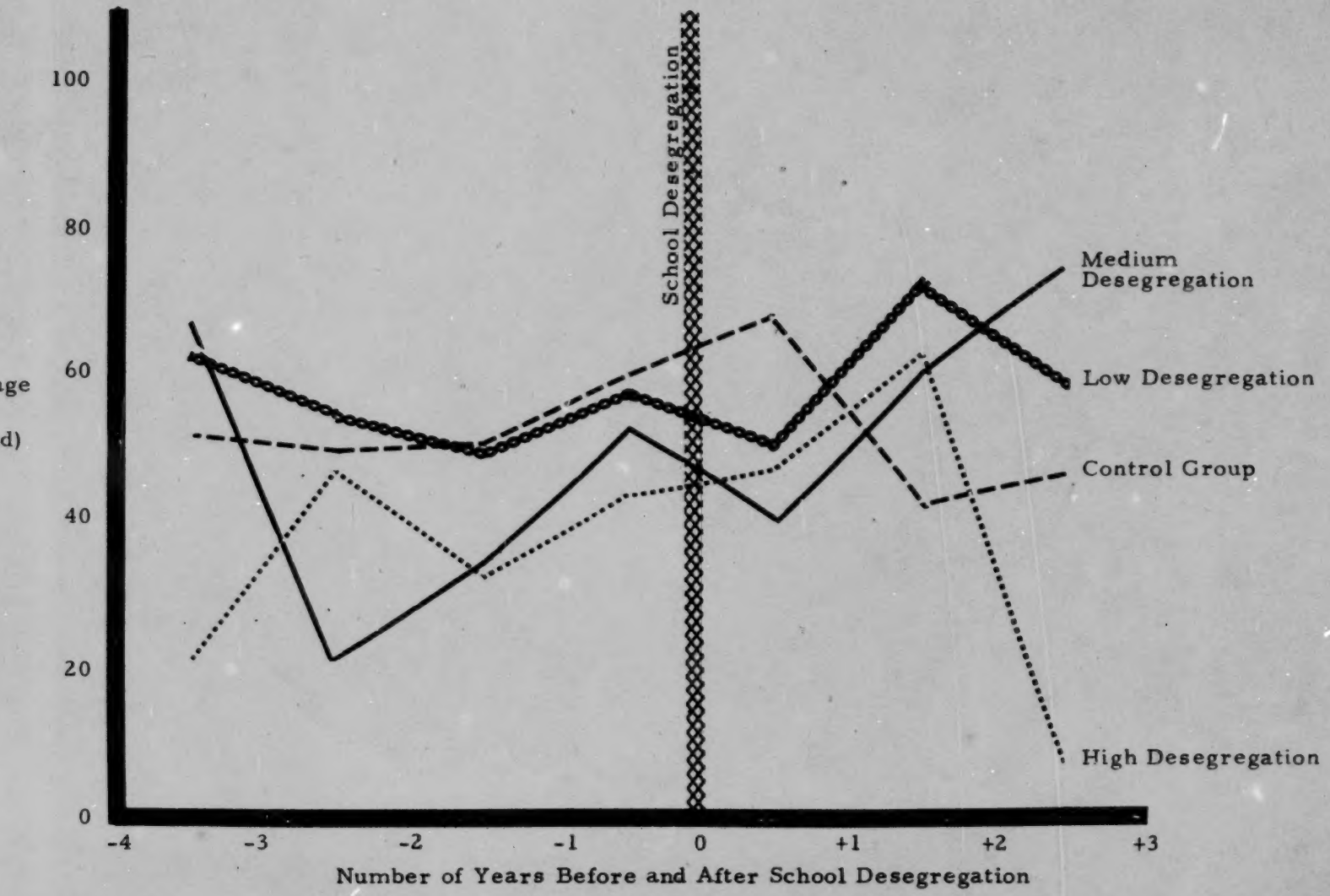

Figure 3: Voting Turnout in School Tax Referenda for Experimental and Control Groups

school tax referenda. So far there is no statistical validation of the hypothesis that school desegregation causes political mobilization in a community or that it is positively related to the level of policy output. Unfortunately, this design and the limitations of the data are likely to err on the side of underestimating effects.

In order to test the hypothesis that political mobilization after school desegregation is greater in higher social status school districts, the sample of desegregating school districts was divided into a high educational level group (above 12.4 school years completed), a medium educational level group (11.6 to 12.3 school years), and a low educational level group (below 11.6 school years).[36] The top half of Figure 4 shows the impact on school board election turnout. For most of the period after the major desegregation plan, school districts with a high educational level have the highest level of political mobilization, those with a medium educational level have the next highest level of political mobilization, and school districts with a low educational level have the lowest level of political mobilization. This is almost a complete reversal of the pre-desegregation pattern. By the third year after desegregation, however, the pattern has been reversed again, with the lowest educational level group having the highest turnout.

The top half of Table 4 shows the significance of the series. While visual inspection of the figure shows the relationship to be in the direction hypothesized, neither the change observed in the high educational level

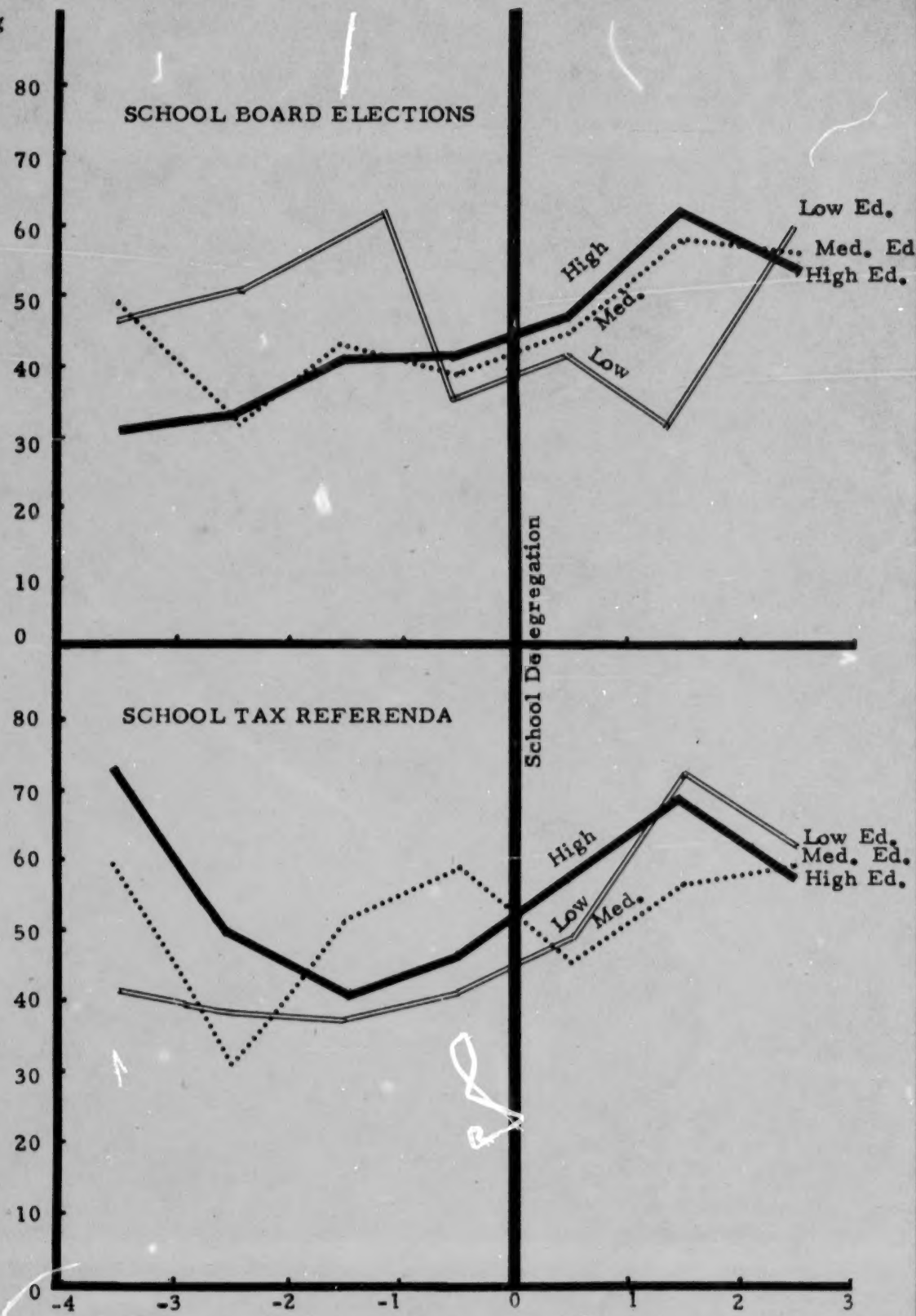

Figure 4: Voting Turnout in School Board Elections and School Tax Referenda Controlling for Educational Level

TABLE 4

The Effect of Educational Level on Political Mobilization in School Board Elections And School Tax Referenda in Desegregating School Districts

	Slope		Intercept		Single-Mood (df=2)	Double-Mood (df=3)
	Pre	Post	Pre	Post		
School Board Elections						
High Educational Level (>12.4 years)	3.7	1.8	29.1	42.3	.07	.46
Medium Educational Level (11.6-12.3)	-1.4	3.1	44.6	31.1	.73	.53
Low Educational Level (<11.6)	-3.8	6.6	57.4	3.2	.28	.30
School Tax Referenda						
High Educational Level	-8.5	1.9	73.2	49.5	1.7	1.2
Medium Educational Level	2.6	7.0	43.8	10.4	.8	.7
Low Educational Level	.6	7.7	39.7	14.9	.8	.5

group nor the medium educational level group is great enough to be statistically significant.

The bottom half of Figure 4 shows the impact of school desegregation on school tax referenda turnout within each educational level group. The pattern is less clear than that observed in school board elections. While school districts with the highest educational level have the highest voter turnout after school desegregation, those with a medium educational level actually declined in voter turnout after desegregation. In general, the post-desegregation pattern is not much changed from the pre-desegregation pattern, except that by the third year after desegregation, the pattern has reversed itself again. The t-test values presented in the lower half of Table 4 indicate there is no statistically significant change in the highest educational group.

Therefore we must, although reluctantly in the case of school board elections, accept the null hypothesis that educational level has no effect on the degree to which school desegregation mobilizes the electorate. However, these hypotheses will be tested in a later section of the paper with multiple regression equations.

Political Opposition: Results of the Time Series Quasi-Experiments

It was hypothesized earlier that school desegregation would have the effect of increasing dissent voting in school board elections and school tax referenda. School desegregation is a controversial, perhaps unpopular, policy and voting is the least costly of the options available to citizens to

express dissatisfaction. Therefore, it will be the most frequently used option because of its low cost and availability. It was further hypothesized that the level of policy output would be positively related to the level of opposition, and that the greatest opposition in school board elections would be in high status school districts but in tax referenda, it would be in low status districts.

The top half of Figure 5 shows the impact of the implementation of school desegregation on school board dissent (the percentage of incumbents defeated) for all the desegregating groups combined compared to the control group. While the control group shows a fairly steady increase over time, the desegregating group has a sharp rise after school desegregation and then a continuation of the previous systematic trend toward the increasing defeat of incumbents. This seems to indicate that school desegregation has the hypothesized effect, but it is also clear from the trend exhibited in the control group, that school board seats are no longer the safe positions they once were.

Figure 6 shows the interrupted time series quasi-experiment testing the hypothesis that the level of policy output is positively related to the percentage of incumbents defeated. The pattern is, as usual, difficult to discern by visual inspection. All of the experimental groups indicate a large increase in the percentage of incumbents defeated while the control group only shows a slight increase. However, this is not clearly related to the level of policy output since the low desegregation

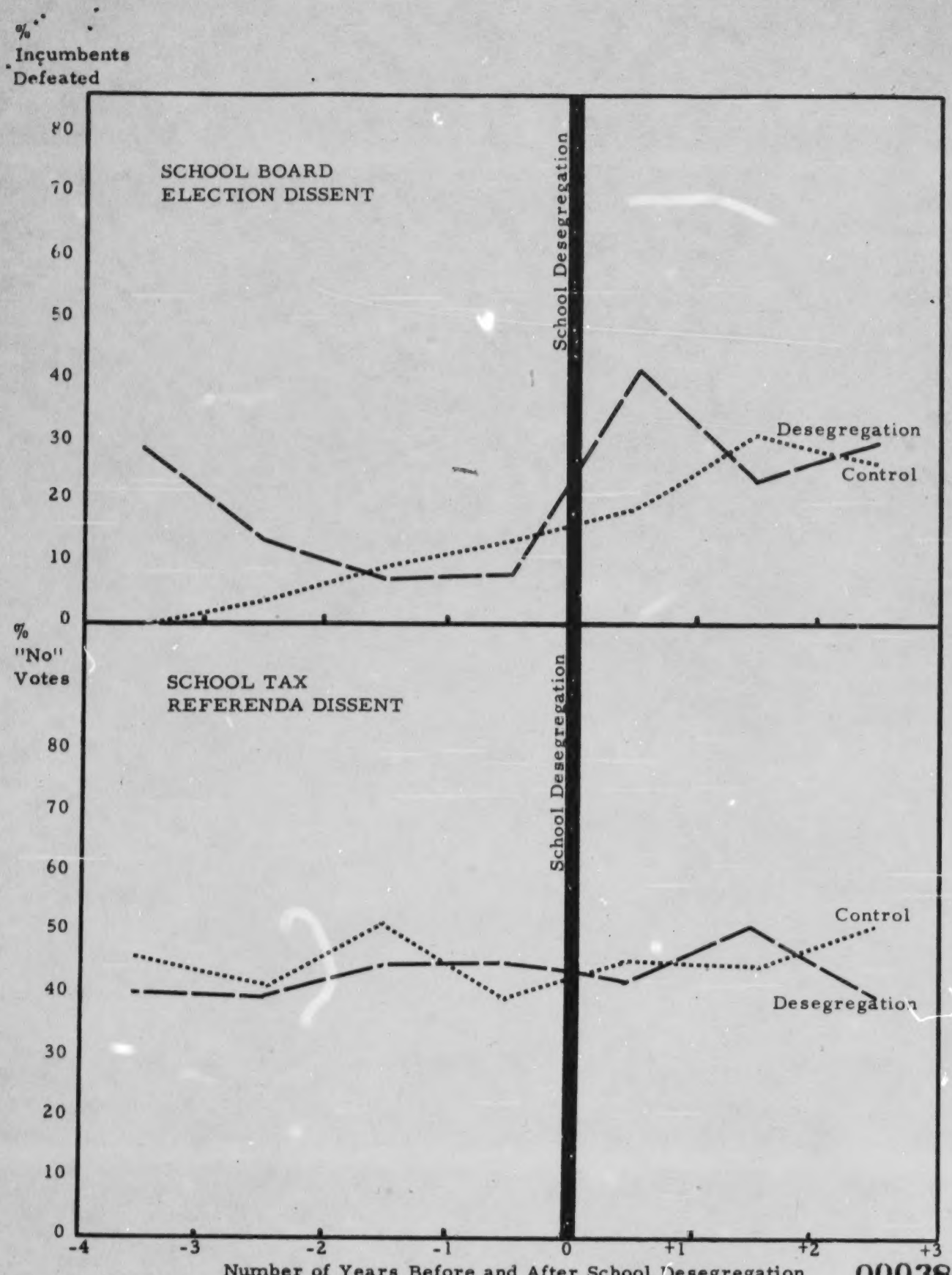

Figure 5 . School Board Election Dissent and School Tax Referenda Dissent for Two Groups: All Desegregating School Districts and a Control Group

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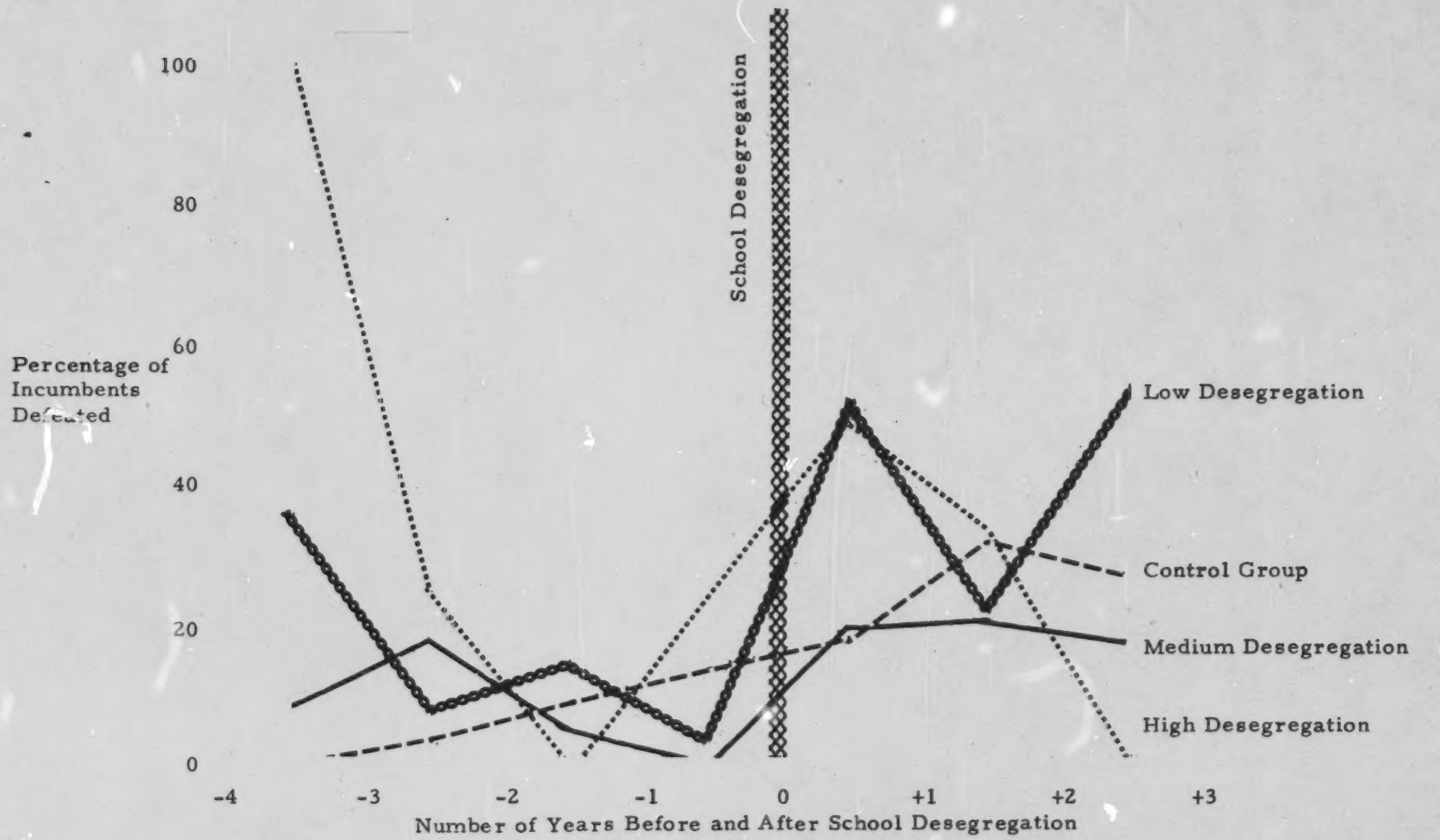

Figure 6: Percentage of Incumbents Defeated in School Board Elections for Experimental and Control Groups

group has a higher percentage of incumbents defeated than the high desegregation group.

Table 5 shows the significance of these patterns. Each of the experimental groups, as well as the experimental groups combined (all desegregation groups), shows a significant change in the first school year after desegregation (single-Mood) and for the three years after school desegregation (double-Mood). (However, the double-Mood test is only significant because of the tremendous decline in the percentage of incumbents defeated after the first post-desegregation school year.) Neither tests are significant for the control group which continues to have a moderately positive slope. Thus the first rival hypothesis that the observed changes in the experimental groups are the result of random variation can be tentatively rejected.

The second rival hypothesis that voting pattern changes are due to short-term or long-term systematic trends unrelated to school desegregation can be tentatively rejected by visually comparing the desegregating group with the control group in the top half of Figure 5. The first point after desegregation is a significant disruption of the pre-test series for the desegregating group, but not for the control group. Furthermore, the desegregating group returns to the moderately positive slope evidenced by the control group after the first year, and this seems to be the systematic trend (from which the desegregating group departed briefly with the advent of desegregation.)

TABLE 5

The Effect of School Desegregation on Political Opposition in School Board Elections

	Slope		Intercept		Single-Mood (df=2)	Double-Mood (df=3)
	Pre	Post	Pre	Post		
All Desegregation Groups	-6.8	-5.9	31.4	67.4	7.5[a]	3.6[a]
High Desegregation Group	-25.0	-25.0	100.0	177.7	1.9[c]	1.7[c]
Medium Desegregation Group	-3.6	-1.7	16.6	29.5	3.0[b]	2.5[c]
Low Desegregation Group	-8.6	.4	36.9	40.2	4.8[b]	1.6[c]
Control Group	4.6	4.0	-4.9	1.9	.6	.6

[a] Significant at .01 or better

[b] Significant at .05 or better

[c] Significant at .10 or better

Another rival hypothesis to consider is whether unmeasured variables or events can explain the observed change. Again, one basis for rejection of this hypothesis is the fact that the control group represents a sample of northern U.S. cities that desegregated in differing years ranging from as early as 1964 to as late as 1971. It is unlikely they would all have unmeasured variables with the same effect in different years.

The fifth rival hypothesis[37]--that observed changes are the result of maturation changes--is unlikely for two reasons. First, it is hard to think of any reason why desegregating school districts would change in their election patterns in a way that would be significantly different from the control group because of characteristics that are related to their having selected school desegregation in the first place. Secondly, the nature of the change is such that it is clearly not part of a "growth pattern," but in fact is a real disruption of, with a subsequent return to, a pattern that looks similar to the control group.

At this point we can conclude that school desegregation does appear to increase political opposition in school board elections, although it has not been shown to be positively related to the level of policy output. An important part of the phenomena is that the increase in opposition is not permanent. At least one explanation can be ruled out. The decline in opposition is not due to white flight, as current research being conducted by the author indicates that an increase in white flight is minimal (0 - 3 % of the white student population) and temporary.[38] It is evidenced primarily in the first year of the plan before school opens, and therefore would not explain

a decline in opposition in the second year(after an increase in the first year.)

Another possible explanation for the decline in opposition is that the relationship between the school board as decision-makers and the policy itself becomes less clear the further away in time one gets from the decision. Thus residual opposition remains, but it is less likely to be directed at the school board. The last possible explanation for this decline is that after the initial opposition dies down, people internalize the decision, and actually come to accept it. If this phenomena is correct, as some case studies have suggested, then school desegregation could ultimately end up increasing social integration, perhaps because of the initial conflict and the pressure towards involvement it brings.[39]

The lower half of Figure 5 shows the time series quasi-experiment for assessing the impact of school desegregation on the percentage of "no" votes in school tax referenda. There appears to be no relationship between the implementation of school desegregation and dissent voting in school tax referenda for most of the post-desegregation period.

Figure 7 tests the hypothesis that a higher level of policy output will be positively related to a higher percentage of "no" votes. Again, there appears to be no clear relationship between the level of policy output and the level of dissent voting in tax referenda, although the high desegregation group does have the highest level of opposition for the first two years after desegregation.

Table 6 shows the significance of these patterns. The only group showing any significant change is the low desegregation group which

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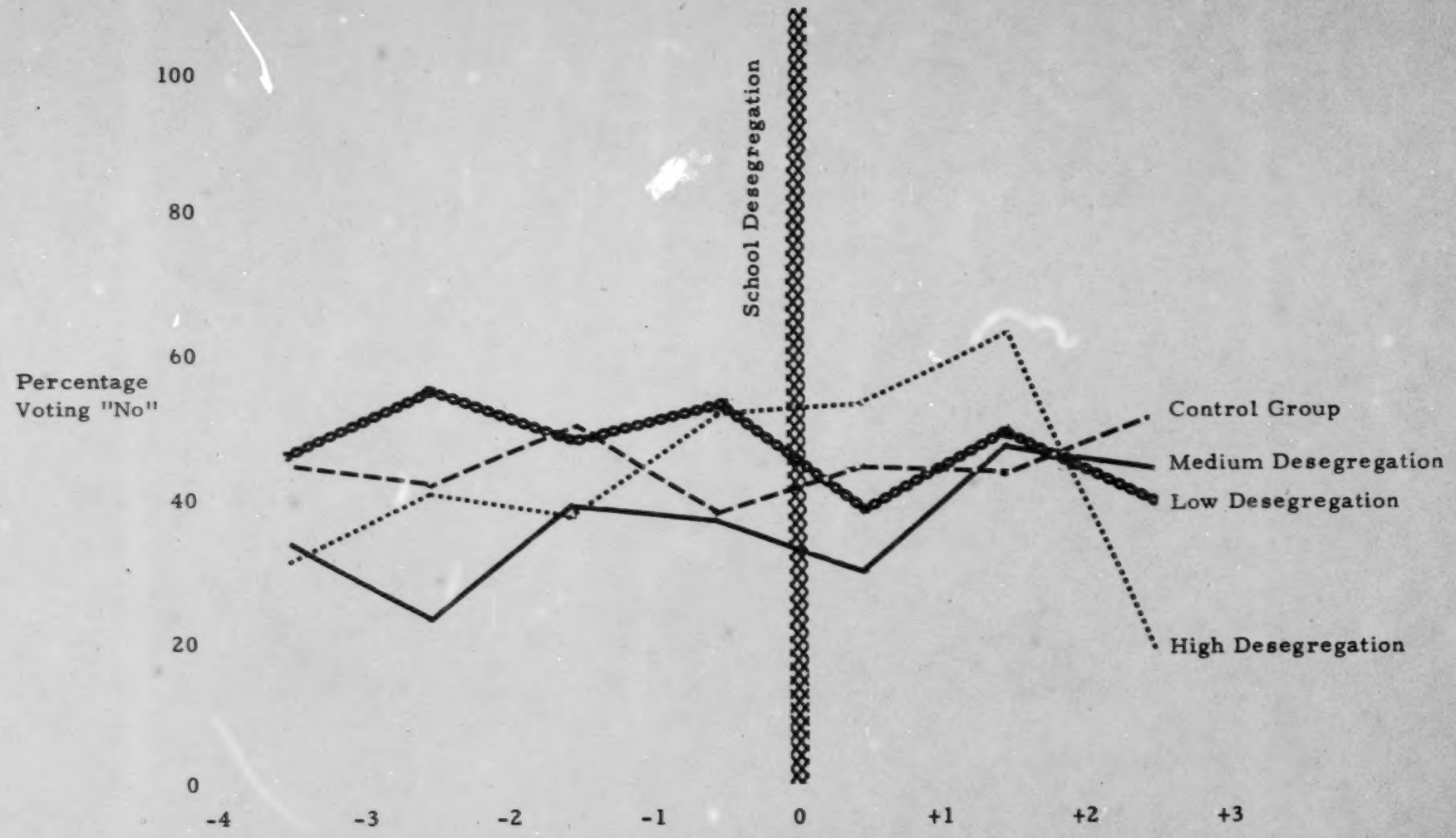

Figure 7: Percentage of "No" Votes in School Tax Referenda for Experimental and Control Groups

TABLE 6

The Effect of School Desegregation on
Political Opposition in School Tax Referenda

	Slope		Intercept		Single-Mood (df=2)	Double-Mood (df=3)
	Pre	Post	Pre	Post		
All Desegregation Groups	1.9	-1.3	36.8	51.5	1.7	.04
High Desegregation Group	5.9	-17.1	25.3	147.1	.5	.8
Medium Desegregation Group	2.7	6.5	27.1	2.0	1.2	.7
Low Desegregation Group	1.0	-.3	48.4	43.8	2.9[a]	1.2
Control Group	-.9	3.3	46.5	27.3	.5	.01

[a]Significant at .05 or better

shows a significant single-Mood test only because the first post-desegregation point is lower than would be expected on the basis of the pre-desegregation series.

Figure 8 tests the hypothesis that political opposition against school board incumbents will be greater in higher status school districts, and negative tax referenda voting greater in lower status school districts. Table 7 shows the significance. The desegregating school districts are divided into groups of high, medium, and low educational levels. Visual inspection of the series for school board elections in the top half of the graph indicates that just the opposite of the hypothesized pattern has emerged, at least in the first post-desegregation year. The greatest opposition (and change from the pre-desegregation period) is found in the low educational level group, and it is statistically significant. The next greatest opposition and significant change from the pre-desegregation period is in the medium educational level group. The high educational level group, on the other hand, shows no significant change from the pre-desegregation period and for most of the post-desegregation period is the lowest in opposition.

The series for school tax referenda seems to be what was expected--that is, political opposition is greater in lower status school districts than in higher or medium status districts. Although the low educational level group also has the highest level of opposition during the pre-desegregation period, it shows the greatest significant increase

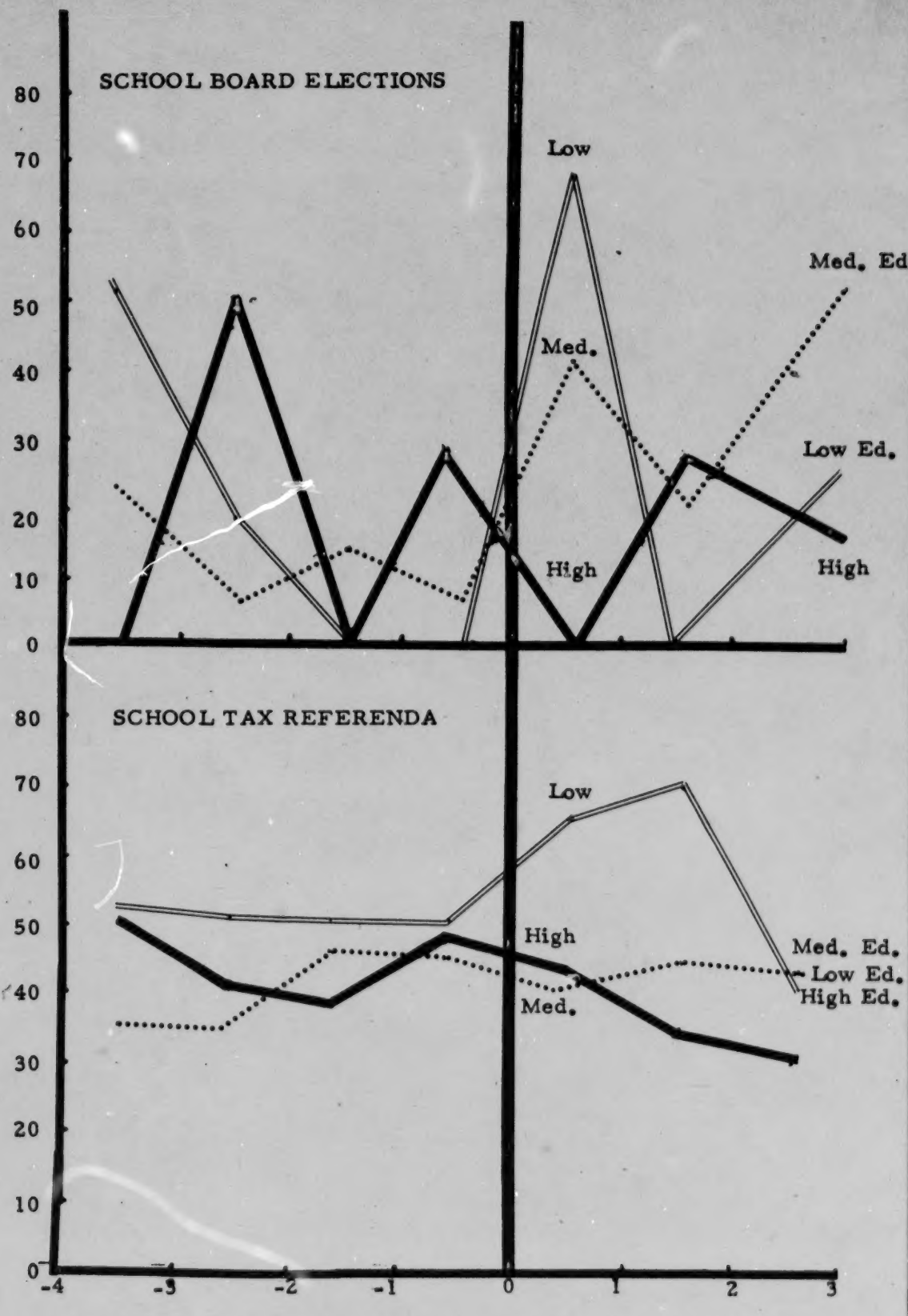

Figure 8: Dissent Voting in School Board Elections and School Tax Referenda Controlling for Educational Level

TABLE 7

The Effect of Educational Level on Political Opposition in School Board Elections and School Tax Referenda in Desegregating School Districts

	Slope		Intercept		Single-Mood (df=2)	Double-Mood (df=3)
	Pre	Post	Pre	Post		
School Board Elections						
High Educational Level (>12.4 years)	4.9	6.3	8.4	-22.2	1.0	.5
Medium Educational Level (11.6-12.3)	-4.3	.4	23.2	36.9	5.1[b]	2.2[b]
Low Educational Level (<11.6)	-16.6	-20.8	58.3	155.3	6.9[a]	2.0[c]
School Tax Referenda						
High Educational Level	-1.1	-4.0	47.4	63.3	.3	.7
Medium Educational Level	3.4	3.4	31.3	21.3	2.7[c]	1.5
Low Educational Level	-1.0	-12.3	51.7	129.5	8.2[a]	2.2[c]

[a]Significant at .01 or better

[b]Significant at .05 or better

[c]Significant at .10 or better

with the advent of the major desegregation plan. The medium and high educational level groups show almost no change whatsoever, although the medium desegregation group is statistically significant because the first point after desegregation is lower than would have been expected on the basis of the pre-desegregation pattern.

These relationships (particularly that found in school board elections) refute the Crain and Rosenthal thesis that there will be greater electoral opposition to controversial policies in higher status (higher educational level) communities as a result of the greater levels of community debate, and higher levels of controversy.[40] On the other hand, the data presented in this paper do not necessarily corroborate those students of electoral conflict, such as Minar and Coleman, who argue that higher status communities have greater conflict resolution ability.[41] In fact, the higher turnout after school desegregation in high educational level communities would seem to indicate that they have not necessarily held conflict to a minimum.

The body of literature that seems most appropriate in explaining the fact that lower status school districts exhibit more political opposition after school desegregation is that on the individual level correlates of negative referenda voting. Research undertaken at the aggregate level has been contradictory, as stated earlier. Research on individual level correlates, on the other hand, leaves little doubt concerning the strong positive relationship between an individual's education and his or her support for the educational system.[42]

Whether the effect observed in this study is simply that the aggregate is the sum of the parts or whether it is something more than that is difficult to determine. In a study of eight suburban school districts in Cook County, Boyd argues that there is more referenda dissent in low status school districts, not because they are less able to manage conflict as Minar maintained (although that is part of it), but primarily because of a political culture that emphasizes "machine politics," personal benefits and favors from the school system, and allegiance to sub-communities and groups rather than the whole community.[43] In short, his work supports Banfield and Wilson's political ethos theory. Moreover, the culture that Banfield and Wilson show to be characteristic of low status communities has also been shown to be characteristic of low status individuals. Thus there is a possibility that the aggregate is indeed the sum of the parts.[44] On the other hand, it is also possible that lower status school districts have so many problems that innovative policies are considered risky and additional spending and taxation unbearable financially. This aura may so pervade the community that it affects the voting behavior of more highly educated individuals as well so that it conforms more to what we think of as "low status" voting behavior. If this is the case, it would clearly be erroneous to infer that low status school districts are high on dissent simply because they have more low status individuals who typically vote negatively.[45]

The Multiple Regression Equations

The purpose of introducing a time series of multiple regression equations is twofold. First, as mentioned earlier, the multiple regression equations compensate for the limitations of the interrupted time series design--its lack of a strength of association measure and a test for multiple influences. Secondly, the multiple regression equations may help compensate for violations in the assumptions of the interrupted time series design necessitated by the peculiarities of this data--elections occurring at irregular intervals and the lack of a one-time only treatment.

Table 8 displays, for each school year before and after the major desegregation plan, the direct multiple regression equations between the four election variables and the log of the degree of school desegregation[46] (including any past policy output) controlling for several political and social variables that might also explain the electoral phenomena observed. An identical equation was also computed with a dichotomous variable measuring school desegregation (0=did not desegregate; 1=desegregated, including any past policy output). The variance explained for the equation with the dichotomous desegregation variable is presented only to evaluate the relative importance of the two desegregation variables by comparing variance explained in addition to the Beta.[47] It is important that the reader understand that these equations are not complete models of all the variables that might explain the election phenomena under observation.

Table 8

The Relationship of School Election Turnout and Dissent To School Desegregation Controlling for Other Political and Social Variables in Each Year Before and After Major School Desegregation

Time Period	-3 - 4 Years		-2 - 3 Years		-1 - 2 Years		-0 - 1 Year		0 - 1 Year		+1 - 2 Years		+2 - 3 Years		All Post-Deseg.	
Dependent Variable: School Board Turnout	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta	Zero Order(r)	Beta
Independent Variables																
Degree of School Desegregation	.06	b	-.11	-.16	.11	.11	.08	.10	.29	.47	.29	.16	.56	.62	.34	.37
School Desegregation (Dichotomized)[a]	.06	b	-.06	-.13	.04	.02	.09	.17	.52	.61	.19	.06	.43	.41	.36	.35
Court Ordered	c	c	c	c	c	c	c	c	-.28	-.23	.07	-.02	c	c	-.08	-.13
Educational Level	.05	-.07	-.26	-.27	-.04	b	.11	.11	.18	.04	.39	.10	.28	.19	.27	.12
School Board Racial Liberalism	.36	.34	.16	.25	.18	.11	.16	.12	-.06	-.19	.13	b	.07	-.18	.05	-.10
School Directed Civil Rights Activity	.21	.16	-.12	-.10	.46	.46	-.26	-.30	-.27	-.24	-.44	-.31	-.11	-.30	-.26	-.22
r^2 with Degree of Deseg.		(.15)		(.14)		(.24)		(.12)		(.26)		(.25)		(.42)		(.22)
r^2 with Deseg. Dichot.		(b)		(.14)		(.23)		(.13)		(.44)		(.24)		(.27)		(.23)
	N=24		N=37		N=25		N=39		N=29		N=30		N=21		N=80	
Dependent Variable: Tax Referenda Turnout																
Independent Variables																
Degree of School Desegregation	c	c	.36	.36	-.07	-.11	.08	.16	-.46	-.49	.40	.06	.19	.11	-.05	b
School Desegregation (Dichotomized)[a]	c	c	.36	.12	-.07	-.11	.00	.21	-.35	-.29	.38	b	.23	.15	.01	.05
Court Ordered	c	c	c	c	c	c	c	c	-.43	-.35	c	c	-.54	-.63	-.37	-.43
Educational Level	.39	.39	.16	-.35	.20	.20	.18	.21	-.07	.30	.37	.04	.30	.15	.13	.21
Percentage Foreign Stock	.19	.14	.74	.72	.19	.12	.51	.44	.08	.20	.33	.28	.11	-.24	.16	.12
School Directed Civil Rights Activity	-.07	-.12	.01	-.17	-.10	-.03	-.31	-.28	.30	.43	-.60	-.55	.56	.43	.08	.24
r^2 with Degree of Deseg.		(.19)		(.61)		(.07)		(.36)		(.21)		(.46)		(.46)		(.22)
r^2 with Deseg. Dichot.		(b)		(.58)		(.07)		(.37)		(.19)		(.46)		(.46)		(.23)
	N=17		N=15		N=22		N=20		N=23		N=15		N=17		N=[illegible]	
Dependent Variable: School Board Dissent																
Independent Variables																
Degree of School Desegregation	.38	.47	.10	b	-.27	-.32	-.01	.12	.16	.24	-.05	-.31	-.07	.21	.03	-.03
School Desegregation (Dichotomized)[a]	.38	.46	.23	.18	-.29	-.32	-.02	.07	.18	.30	-.13	-.35	.06	.26	.04	b
Court Ordered	c	c	c	c	c	c	c	c	-.18	-.44	.27	.36	c	c	.06	.07
Educational Level	-.11	-.33	-.06	-.09	-.06	-.03	-.13	-.20	-.05	-.11	.09	.05	.00	.17	.01	b
School Board Racial Liberalism	.21	.12	.27	.29	-.09	b	-.18	-.29	.22	.19	.18	.27	-.40	-.50	.05	.07
School Directed Civil Rights Activity	-.26	-.18	.00	b	-.15	-.32	-.13	-.05	.26	.34	b	b	.03	-.10	.02	.02
School Board Turnout	.20	.19	.04	-.03	.13	.31	.35	.40	-.07	-.10	.23	.24	-.15	-.29	.03	.06
r^2 with Degree of Deseg.		(.33)		(.08)		(.18)		(.22)		(.26)		(.22)		(.23)		(.01)
r^2 with Deseg. Dichot.		(.32)		(.10)		(.18)		(.21)		(.27)		(.25)		(.25)		(.00)
	N=21		N=30		N=25		N=31		N=24		N=25		N=18		N=67	
Dependent Variable: Tax Referenda Dissent																
Independent Variables																
Degree of School Desegregation	c	c	.16	.55	.03	.21	.00	b	.00	.21	.28	.34	-.44	-.55	-.06	.04
School Desegregation (Dichotomized)[a]	c	c	.28	.45	.02	.21	.02	.23	-.10	.07	.27	.29	-.42	-.51	-.10	b
Court Ordered	c	c	c	c	c	c	c	c	.11	.15	c	c	-.46	-.27	-.09	-.04
Educational Level	-.14	-.40	-.10	-.81	-.07	-.29	.02	-.04	-.26	-.44	-.06	-.24	-.14	b	-.14	-.17
Percentage Foreign Stock	.00	-.05	.36	.14	.28	.32	.74	.55	.16	.20	.31	.31	-.18	-.39	.12	.13
School Directed Civil Rights Activity	.13	.23	-.28	-.52	.05	.21	-.26	.05	.25	.09	-.06	-.27	.22	.30	.14	.11
School Tax Referenda Turnout	.40	.59	.46	.14	.64	.68	.65	.39	.13	.22	-.07	-.38	.47	.30	.18	.16
r^2 with Degree of Deseg.		(.32)		(.50)		(.56)		(.65)		(.55)		(.25)		(.25)		(.08)
r^2 with Deseg. Dichot.		(b)		(.51)		(.56)		(.68)		(.42)		(.24)		(.24)		(.08)
	N=18		N=15		N=23		N=20		N=24		N=16		N=18		N=58	

Major School Desegregation

[a]School Desegregation dichotomized and degree of school desegregation were not run in the same equation. The standardized regression coefficients (Betas) for the control variables are those obtained from the equation with degree of school desegregation.

[b]Dropped out of the equation.

[c]Cannot be computed--insufficient cases

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This is because (1) the N is too small to include a large number of variables so as to explain as much of the variance as possible, and (2) the point of the equations is really to determine if the relationship between school desegregation and the dependent election variable is a spurious or erroneous one by controlling for variables that are related to school desegregation and/or might also explain the election phenomena.[48] In addition, by understanding what else might be related to the election phenomena, the development of theory will be enhanced.

The underlying causal model on which this analysis is based is presented in a path diagram for each of the post-desegregation school years in Figure 9 (school board elections) and Figure 10 (school tax referenda). Residual paths and those with path coefficients less than .05 have been eliminated from the path diagram. The path diagram is useful in showing the hypothesized temporal order of the variables in the direct equations in Table 8.

The equations in Table 8 are indicated in Figures 9 and 10 by the direct arrows from each of the independent variables to turnout and to dissent. The measure of association indicated above the arrows is a path coefficient, also called a standardized regression coefficient or Beta. It is the same measure of association indicated in the equations in Table 8.

The zero order correlations and the path coefficients tell us several things that could not be obtained from the bi-variate interrupted

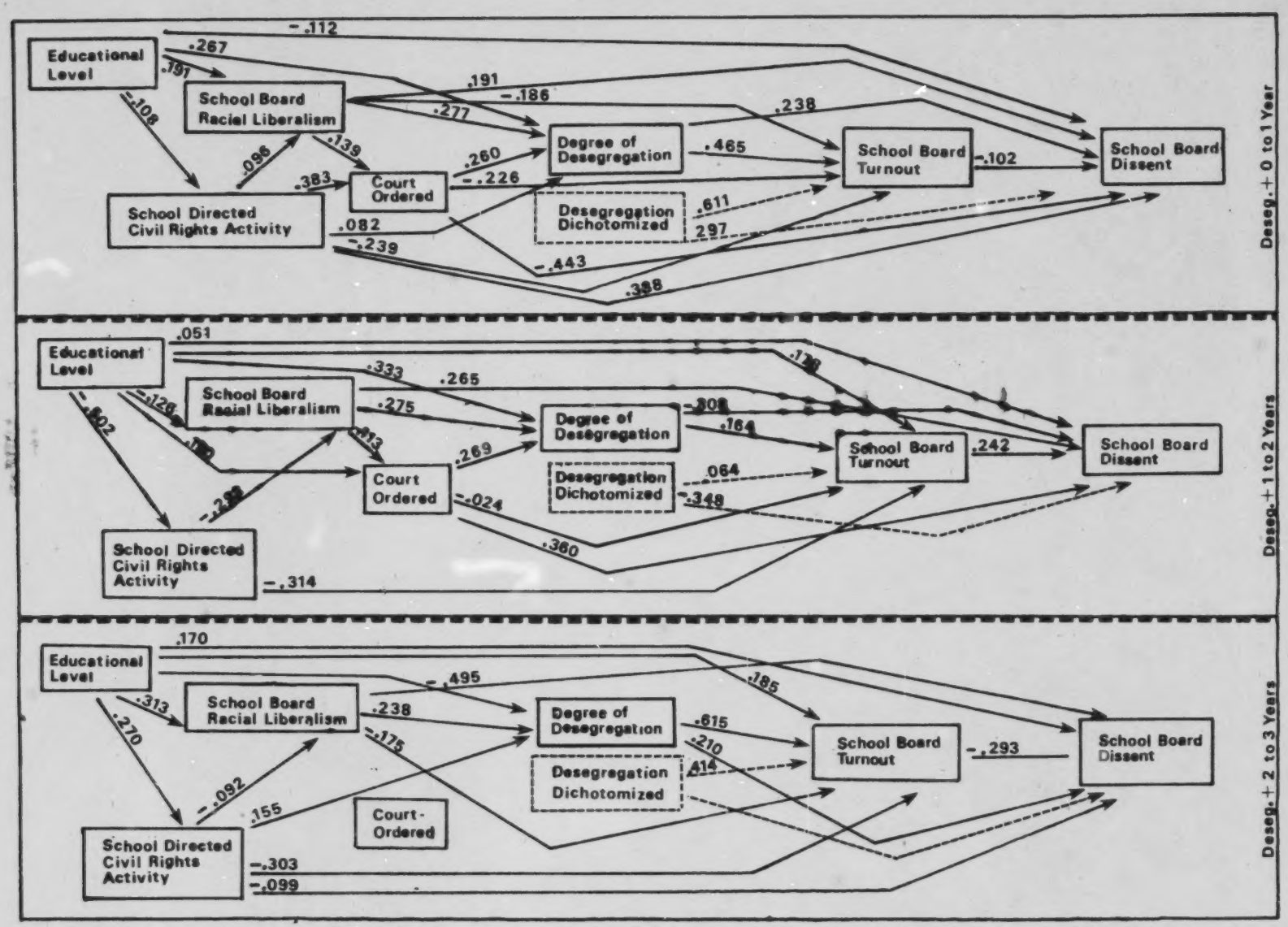

Figure 9: A Causal Model of School Board Election Turnout and Dissent in Each School Year After School Desegregation

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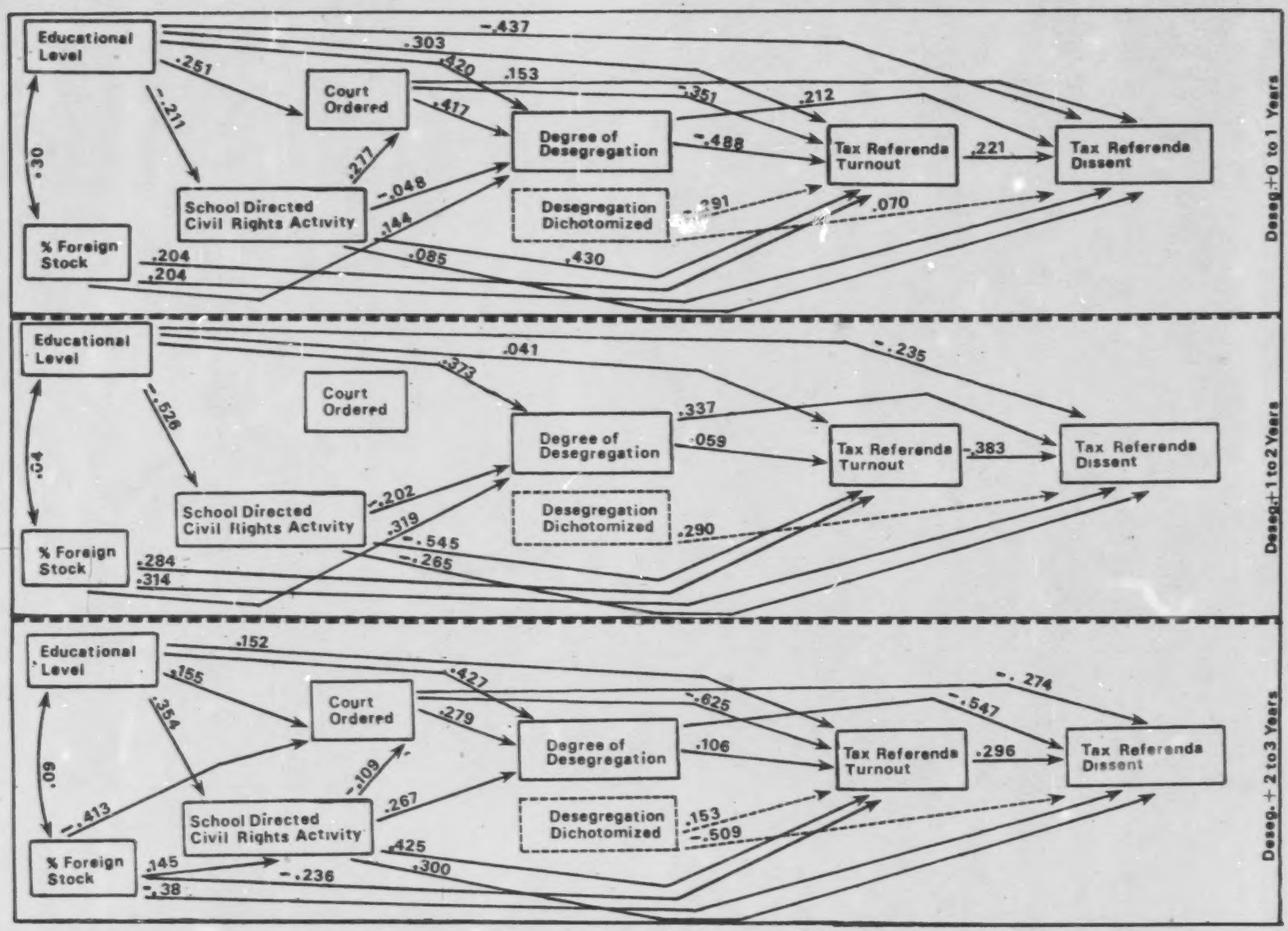

Figure 10: A Causal Model of School Tax Referenda Turnout and Dissent in Each School Year After School Desegregation

time series. First, the level of policy output is positively related to the level of turnout in school board elections.[49] This positive relationship is not very great, however, until the major desegregation plan which seems to have a "triggering" effect that minor actions do not. Furthermore, this triggering effect does not seem to be dependent on the size of the major plan since it is even more highly related or as highly related to the dichotomous variable. Perhaps the major plan is given greater publicity and this results in greater mobilization than minor adjustments before it. Or there may be an interaction effect between school desegregation and the period of implementation, as most of the major plans are post-1967.

In general, the relationship between school board election turnout and school desegregation is only slightly reduced by the controls that the path analysis models in Figures 9 and 10 show to be predictors of the degree of school desegregation. Furthermore, it does not change substantially from the yearly equations to the summary equation in the last column of Table 8.

The equations also confirm that the social status of a school district is positively related to the level of turnout (except in the first two or three school years before the major school desegregation plan.) Court ordered desegregation, although positively related to the degree of school desegregation is negatively correlated with the level of turnout, despite some spectacular disruptions and prolonged publicity in some court ordered school districts. The path diagrams in Figure 9 tell us,

however, that court order is mitigated in its negative relationship to school board turnout by its positive relationship to the degree of school desegregation. This negative relationship is also unexpectedly true of civil rights activity directed at the schools[50] which one would expect to politically mobilize the electorate, but in fact seems to have the opposite effect. School board racial liberalism[51] also has a negative relationship with board election turnout.

The multiple regression equations for tax referenda turnout are inconclusive. No consistent relationship appears between school desegregation and turnout when the dichotomous variable is used, or when the continuous variable is used. As Figure 3 seemed to indicate there is a negative relationship between the level of policy output and the level of turnout in the first post-major desegregation year. The relationship is weakly positive, however, in every other school year. The educational level of a school district is positively related to the level of turnout. Again, court ordered desegregation is negatively related to the level of turnout, but civil rights activity is positively related to the level of turnout for most of the period, as is percentage of foreign stock (a reaffirmation of the Alford and Lee finding.)[52]

We turn now to the multiple regression equations predicting the level of political opposition reflected in school board elections and school tax referenda after school desegregation. The path analysis models in Figures 9 and 10 show the way in which it is hypothesized that the level

of turnout will be "prior" to the level of dissent. Numerous studies have shown that the higher the level of turnout, the higher the level of dissent in referenda, and argued that it is the high turnout that is responsible for the high dissent.[53] The theory generally holds that a small vote consists mostly of votes cast by the non-alienated, those most involved in community affairs. A large turnout, on the other hand, is indicative of increased tensions in the political system and probably means that the alienated, who are often nonparticipants, have been attracted to the political arena to register a protest.

Stone, however, in a study of fluoridation referenda, found that high turnout was sometimes related to dissent and sometimes not.[54] Carter and Savard's study of school tax referenda found that turnout in the middle range (31-60 percent) was associated with more failures than successes, but that the highest turnout range (over 60 percent) found equal outcomes.[55] Wirt and Kirst also found that in California between 1966 and 1970, the proportion of success for each turnout rate declined sharply, except with the districts with the greatest turnout.[56] Furthermore, Hamilton's study of open housing referenda shows low turnout to be associated with defeat. He argues that the reason for this is due to the fact that a large proportion of the "alienated," unattached voters are blacks who are supportive of racial change policy. Thus a high turnout would reflect their being drawn into the electorate and would result in passage of the issue.[57]

This study also finds a contradictory pattern. In most of the pre-major desegregation years, turnout is positively related to dissent in both school board elections and school tax referenda. After the major plan, it is positively related in some years and negatively related in others. It may be that the years in which it is negatively related to dissent are years in which the black electorate are drawn into the election, or in which a carefully controlled anti-busing campaign is conducted.

There are two known examples of such a purposely low turnout dissent campaign being conducted in this sample. One of these campaigns was waged in Detroit in 1970 where an anti-busing group called the Citizens Committee for Better Education conducted a low budget campaign to recall the school board responsible for the desegregation decision. They avoided the downtown media and relied on white neighborhood shopping papers for publicity and on local churches and schools for meeting places. Although they succeeded in getting the issue on the state primary ballot, the turnout was the lowest in several years. The dissent vote, on the other hand, was quite high because the few voters who voted on the recall were white, anti-busing voters who had been politicized by the CCBE campaign. In black neighborhoods, not only was the turnout lower, but in some areas almost half the voters ignored the recall issue on the voting machine ballot because they were not aware of it.

Rochester, New York is another case in which a carefully controlled anti-desegregation campaign was waged in the general election

for school board in 1971. The highest electoral dissent in the history of the city was associated with the lowest turnout. A small, vociferous white minority turned out to "vote down" the school desegregation plan represented by two out of three of the board incumbents. Policy voting was so high that the third incumbent running in the election was reelected because he had not voted for the integration plan.

These low turnout, high dissent elections are possible because of the fact that normally low stimulus elections such as school elections, primaries, and special elections favor organized groups. If a dissenting interest group can organize a low keyed campaign in which those citizens most likely to vote "no" are encouraged to turn out for the election, then a low turnout will favor a high dissent. This is likely in a post-desegregation election because it is white voters who are most likely to be dissent voters, and they typically have a higher "normal" turnout than blacks (by the standards of alienation theory, they are considered to be more "attached," or less "alienated.") Therefore a higher than normal turnout can mean the infusion into the electorate of unparticipative, "unattached" black voters who would tend to be supportive of school board incumbents in a post-desegregation period and of school tax referenda in general.[58] This possibility points up the limitations of the "alienation" theory.

In examining the relationships observed for school board election dissent, it becomes apparent that policy impacts can be quite dependent on the year examined. There is danger in a simple cross-sectional analysis

of one year or all the post-policy years summarized as in the last column of Table 8. Relationships which seemed quite clear in the first post-major desegregation year almost totally disappear when the whole period is examined as one entity. In previous analysis conducted by the author on an average of school board electoral outcomes for the 1968 through 1972 period, somewhat different relationships appeared. In this earlier cross-sectional analysis, there is some similarity to the summary measures in the last column of Table 9, but desegregation under court order was much more strongly positively related (.53) to school board dissent and degree of school desegregation was much more strongly negatively related (-.31).[59] It seems clear, for the reasons discussed earlier, that the most important relationships are those found in the first school year after the major desegregation plan. Therefore, previous work conducted by the author using a simple cross-sectional summary of the post-1967 period is at best misleading. On the other hand, it is useful to know that the impact is not lasting, although research needs to be continued to determine exactly why it is not lasting.

While the pattern does vary from year to year, some relationships stand out. The school board's racial liberalism is positively related to defeat in almost every year of the study except the first year before the major plan and the third year after the plan.[60] In only one year is civil rights activity directed at the schools positively related to the defeat of incumbents and that is in the first school year of the major desegregation

plan. The advent of the plan coupled with civil rights activity undoubtedly increases the impression of risk and error surrounding such a controversial policy decision. Furthermore, if civil rights demonstrations coincide with the implementation of a plan,[61] it is either because the plan does not go far enough, or as in Boston during the 1974-75 school year, it is to counteract white resistence activity. In either case, it is indicative of the dissatisfaction of an important segment of the community.

The behavior of the variable, court ordered desegregation, is difficult to explain, and there is some suspicion that the observed relationships are a function of statistical error due to the small N(9 cases of court ordered desegregation). If we agree that the first school year after the major plan is the most important, then it would seem that court ordered desegregation is negatively related to defeat of incumbents. That is, incumbents are not held responsible for the plan if they desegregate under pressure from a court of law. While this makes sense intuitively, it is difficult to explain why court ordered should always have the opposite relationship of degree of desegregation or desegregation dichotomized no matter what sign they have, except that it is a function of the idiosyncracies of the sample. At the very least, more research has to be conducted before one can except one or the other relationship.

Turning to school tax referenda dissent, we see that the degree of school desegregation is positively related to dissent in almost all years. This confirms a relationship that was obscured in the bi-variate, ordinally

grouped interrupted time series. The dichotomized desegregation variable is less highly related in most years. The Banfield and Wilson findings for smaller aggregate areas are somewhat confirmed here by the positive relationship between percentage foreign stock and level of dissent in most years except the third year after the major plan. As would be expected from "alienation" theory, civil rights activity directed at the schools is also positively related to dissent, but not very consistently or strongly. (Alienation theory would argue that the civil rights activity provokes dissident white voters into coming to the polls and expressing their hostility toward everything in general.)

It is important to note that the relationship between the degree of desegregation and tax referenda dissent voting is not a permanent one and declines in the third year. Again, at this point in the research one can only speculate as to the reason.(although white flight is ruled out). It may be that by the third year school desegregation has lost its salience, or the policy has become accepted. One other possible explanation may be that the problems of non-desegregating school districts (which tend to be of lower educational level, larger percentage black, larger size, etc.) have become so great that citizen negative voting in response to these problems far outweighs any residual negative voting still remaining in desegregating school districts.

Conclusions: Political Mobilization and Political Opposition

The following hypotheses regarding political mobilization have been proved: school desegregation causes political mobilization in communities (reflected in school board elections); the level of school desegregation is positively related to the level of mobilization (reflected in school board elections); and the educational level of a community is positively related to the level of mobilization.

We can also conclude that school desegregation causes political opposition, although again this is clearest in school board elections. However, the level of policy output is positively related to the level of opposition in both board elections and tax referenda. Lastly, the educatinnal level of a community is negatively related to the level of opposition in both school board elections and school tax referenda. The former is contrary to what was expected.

The critical issue at this point is how these findings can serve to evaluate the achievement of social integration in desegregating communities. While in some ways it may be considered presumptuous, it is assumed that this data in its entirety can give us an indication of the kinds of communities

in which social integration is likely to take place and the permanence of it. First, it is argued here that increased turnout is an indication of increased social integration if it does not also result in increased opposition. In short, the elitist theory of democracy is rejected here--the belief that the political inactivity of the average citizen is a more or less permanent aspect of his or her behavior, not an artifact of the social and political systems; the related belief that political inactivity is a sign of satisfaction with the operation of the political system; the belief that political apathy is not seriously dysfunctional in a democratic system, and the belief by some that widespread apathy may be a prerequisite for the successful functioning of the system. Instead, it is argued here that high turnout is a healthy phenomenon. If a social policy can get people to turn out and vote, then in one sense it is responsible for integrating them into the political system. In this study it is high educational level communities that experience high turnout in response to school desegregation, but low levels of opposition in both school board elections and school tax referenda. Thus it is these communities that have increased social integration because of school desegregation. On the other hand, low educational level communities tend to have the opposite phenomena: low turnout, but high dissent in school board elections and school tax referenda. In these communities, school desegregation can be said to decrease social integration. These patterns are indicated in Table 9 where a 2 x 2 table with turnout on one side and dissent on the other divides the levels of social integration observed in this study into four categories. Cell one

is considered indicative of higher social integration than cell two because it is assumed that a high level of participation even with high dissent is preferable to a low level of participation with high dissent because the latter usually means that a small vociferous anti-busing group has manipulated the election campaign in such a way as to get only the white "no" voters out. At least, in the situation of high turnout, high dissent, people are getting out to vote. That in itself is an indication of reduced alienation since voting, even negative voting, is an act of political involvement predicated on a certain amount of faith that one's vote will have an impact. Cell 4 is typical of school elections in a non-controversial election setting--low turnout, low dissent. This seems to be the response of medium educational level school districts when confronted with a school tax referenda in a post-desegregation period. School desegregation does not seem to have increased the importance of school finances in these communities.

There are two aspects of these patterns that deserve further discussion. The first is that the level of turnout continues to increase in the school board elections of desegregating school districts. The second, is that the level of opposition tends to decline so that the pattern begins to resemble that of the control group. In effect, what appears to be happening is that school desegregation has caused a fairly stable, healthy increase in school board voting participation with only a temporary increase in dissent voting (in both school board elections and school tax referenda). It is tempting to conclude that school desegregation has increased the

Table 9

Levels of Social Integration for Different Types of Turnout and Dissent

Turnout	Dissent: High	Dissent: Low
High	LOW 1	HIGHEST 3
Low	2 LOWEST	4 SAME

2 = low educational level school districts

3 = high educational level school districts

4 = medium educational level school districts (school tax referenda only)

social integration of communities even where it has also increased dissent, because participation seems permanent and dissent only temporary. Yet it is also clear that more research needs to be conducted to determine the exact causes of the decline in dissent before a final judgement can be rendered.

The linkage between public policy and voting preferences has been a concern to political scientists. Therefore a comment is in order on the implications of the increase in dissent voting in response to desegregation for future policy and the behavior of policy makers. It is clear that once a school desegregation decision is made, the voting behavior of the community seems to have little impact on the policy. In only two of the original 70 cities in this sample, was a policy rescinded because of the defeat of school board members (Detroit and Rochester). In the other communities, the new school board continued the policy of the previous regime because in many cases the school district had simply gone too far and invested too much to turn around. In some cases, they were under federal pressure or court order and felt they were unable to change course. In none of the cases was a school desegregation decision rescinded because of the defeat of a tax referendum, although school administrators usually warn the public of such dire consequences as the closing of schools, etc. Therefore, while the public may feel their votes will have an impact in changing policy, in general, "throwing the rascals out" does not do much good, nor does depriving them of funds.

We know, however, from the vast body of literature on representation, that while constituents are not able to hold their representatives accountable in a pure sense, representatives "anticipate" their constituents' preferences. Knowing that the decision to desegregate is likely to defeat tax referenda and get them defeated when they run for reelection, will school board members avoid desegregation for these reasons? The answer is probably yes and no. That is, school board members are not likely to weigh the consequences of policy decisions in the same political terms as a career politician. The job of school board member is generally unpaid, and few board members see it as a stepping stone to higher office. On the other hand, because school board members see themselves as serving their community, they do anticipate public opinion and are reluctant to implement a policy that most citizens oppose. As it becomes clearer and clearer that whites and an increasing number of blacks are reacting negatively to school desegregation and that even the federal government is backing off, the number of school districts implementing a new plan has declined drastically. However, because increasingly the courts and HEW are enforcing northern school desegregation at the local level, school board willingness to desegregate may become a moot point in the future.

WHITE FLIGHT

One of the more critical and widely discussed impacts of school desegregation is its impact on the proportion of white students in the school system. A school desegregation plan is typically designed with a specific, constant racial composition in mind. Furthermore, the educational and social benefits of school integration are said to depend on a substantial white population in the classroom. Therefore, the participation of white students is a sine qua non of school desegregation.

This part of the analysis will deal with changes in percentage white after school desegregation as another indicator of social integration. A declining percentage white in a school system is assumed to be evidence of declining social integration. On the other hand, because it is expected that all school systems will have a declining percentage white as part of a secular trend, the emphasis here will be on whether the implementation of school desegregation significantly increases the decline in percentage white.

While white flight has been a much discussed topic, there has been little systematic research on the subject. Coleman, in a recent paper presented at the American Educational Research Association, and reiterated in subsequent interviews, has claimed to have analyzed the effect of school desegregation on white flight.[62] In fact, his paper is a fraud. Clotfelter, has analyzed school desegregation and white flight but his measure of school desegregation is a dichotomous measure that is not easily generalizable.[63] He found no statistically significant relationship between school desegregation and white flight when a

number of demographic and economic variables were controlled for.

One of the most promising studies of school desegregation and white flight is summarized in a recent issue of Integrated Education. The study was conducted in eight desegregated school districts in Florida in 1973 by Cataldo, Giles, Athos, and Gatlin. In the aggregate only 3.6 percent of the parents interviewed rejected school desegregation by withdrawing their children from their assigned schools. They conclude that if a low annual rate of aggregate "white flight" is a prime criterion for evaluating progress, then school desegregation in these districts should be rated at least a qualified success.[64]

Preliminary analysis of 86 northern school districts are presented in this paper in order to analyze the effect of school desegregation on white flight. These school districts are from the 91 city study described earlier and are the northern sample of the 113 city study currently being conducted by the author. Data was obtained from HEW published statistics beginning in 1967 (not 1968 as Coleman has maintained in his paper and in interviews). Data earlier than that was collected by writing to each school district in the sample. Only about half the school districts had such data. (In a few school districts it was illegal to keep such data.)

The complete data on the percentage white in each of the 86 northern school districts for as many years before and as many after school desegregation as was available is presented in Appendix 1. This data can be verified by checking the HEW directories and by writing the school districts. The change in percentage

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white from the previous school year is presented in Table 10 for each year before and after the largest school desegregation action. The index of the percentage of black and white students reassigned in the largest school desegregation action is presented in the first column after the school district name. The change in percentage white in each year before the major desegregation plan is presented in the columns to the left of the major plan date. The change in percentage white in each year beginning with the major plan is presented in the columns to the right of the major plan date. School desegregation actions taken in addition to the major action are indicated by astericks next to the change in percentage white for that school year. For example, Pasadena's major desegregation plan reassigned 98.48 percent of the black and white students in 1970. The opening of school in the first year of the plan saw a change in the average annual decline in white of about a 2 percent increase. In the Fall of 1972, as indicated by the asterick in the third column after 1970, Pasadena implemented more school desegregation. By this time, however, the decline in percentage white was assuming a figure closer to the pre-major desegregation plan trend. The additional action brought their total desegregation actions, presented in the last column, up to 100.8.[65] The significance of the change from the pre-major desegregation series and the first point after is represented by the single-Mood, the first number under the column headed "significance level." Thus, a decline in percentage white of 4.5 is significantly different from what would have been expected from the previous trend. The second figure in the "significance level"

Table 10
Change in Percentage White From the Previous School Year Computed for Each Year Before and After School Desegregation

School District	% Students Reassigned	Court Ordered	Change in % White Students -7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Year	Major Plan Date	Change in % White Students +0 Years	+1 Years	+2 Years	+3 Years	+4 Years	+5 Years	+6 Years	+7 Years	Signif. Level	Pre-Slope	Post Slope	Total Desegr.
Pasadena, Calif.	98.48	yes		-2.7	-1.9	-1.9	-2.1	-2.0	-2.4	1970	-4.2	-4.5	-2.5*						.01 , .05	-2.0	-3.5	100.8
Pontiac, Mich.	83.47	yes		-1.3	-1.0	-3.0	-3.1*	-1.7	-2.4*	1971	-5.4	-.4							.02 , .02	-2.2	- .4	87.09
Berkeley, Calif.	57.72					-2.2*	-2.2	.7	-1.6	1968	-2.2	-.6	-.8	.2	.9				N.S.	-2.2	- .4	66.32
Wichita, Kansas	44.36			*	-.8*	-.4	-.4*	-1.0*	-1.0*	1971	-1.3	-1.4							N.S.	- .7	-1.4	56.63
San Francisco, Calif.	42 49	yes			-2.9	-1.2	0	-4.1	-.2	1972	-3.0	-2.1*							N.S.	-1.6	-2.1	46.58
Ft. Wayne, Indiana	34.60				-.4	-.5	-1.6	.2	-1.1	1971	-.8	-1.0							N.S.	- .8	-1.0	34.00
Waukegan, Ill.(el.Schl's)	31.72	yes				-1.3	-3.5	-7.8	-1.1	1968	-1.8	-1.9	-1.1	-1.0	-1.9				N.S.	-3.9	-1.4	31.72
Denver, Colo.	24.64	yes				-1.3	-1.4	-1.5	-.6	1969	-1.5	-2.4*	-1.4	-2.0*					N.S.	-1.3	-1.9	29.77
Providence, R.I.	24.10									1967		-2.0	.2	-.2*	-1.7*	-1.0			a	a	a	36.00
Riverside, Calif.	21.40							.7	-.6*	1966	-1.5	-1.2*	.9	-2.2*	-1.0	-1.4	-1.5		N.S.	-.7	-1.1	38.20
Las Vegas, Nevada	19.24	yes				.3	-.6*	-.6*	0	1972	-.8								a	a	a	30.05
Evansville, Indiana	15.77	yes		-.1*	-2.2	-.3	-.1	1.2*	-.3*	1972	..7								a	a	a	29.57
Muncie, Indiana	15.10					.3	-.9	-2.6	1.9	1972	-.3								a	a	a	15.10
Stamford, Ct.	13.20				-2.6	-1.3*	-.8	-1.8*	-1.8	1970	-1.5	-.9	-1.5						N.S.	-1.5	-1.2	21.42
Niagara Falls, N.Y.	11.76						*	-.4*	-.6	1970	-1.3	-.5	-.7						N.S.	- .5	- .6	30.26
Sacramento, Calif.	11.10	yes						*	-1.3	1966	-.2	1.2	-.3*	-1.0	-1.1	-1.1	-1.0		a	a	a	19.98
Oklahoma City, Okla.	10.82	yes						-2.2	-1.1	1968	-1.6	-4.9	-1.2*	-.4	-1.6				N.S.	-1.7	-1.8	11.50
Saginaw, Mich.	9.60					-2.6	- .5	- .6	-2.3	1972	-2.2								a	a	a	9.60
Grand Rapids, Mich.	9.40									1968	-3.1	-.8	-.3	-1.8	-2.2*				a	a	a	10.16
Springfield, Mass.	9.10					-1.8	-1.8	.9*	-3.7*	1968	-1.3	-1.9	-2.7	-2.2	-2.0*				N.S.	-1.4	-2.3	23.05

School District	Students Reassigned	Court Ordered	Change in % White Students -7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Year	Major Plan Date	Change in % White Students +0 Years	+1 Years	+2 Years	+3 Years	+4 Years	+5 Years	+6 Years	+7 Years	Signif. Level	Pre-Slope	Post Slope	Total Desegr.
Ann Arbor Mich.	9.00								-.5	1965	-.1	-.1	-.9	-2.3	-.6	-.8	-1.1	-1.2*	a	a	a	15.48
Lexington, Ky.	8.91									1967		.2	0	-.4*	-.3	-.4			a	a	a	9.66
Baltimore, Md.	7.92			-6.2	-1.5	-4.0	-1.0	-1.1	-.9	1971	-1.1	-1.1							N.S.	-2.4	-1.1	7.92
Tulsa, Oklahoma	7.83	yes		-.1	-.2	-.4	-4.8	-.1	-.6*	1971	-.5*	-1.9*							N.S.	-1.2	-1.9	14.36
Peoria, Ill.	7.83									1968	-.8	-.9*	-1.0*	-1.1*	-1.4*				a	a	a	15.86
Cambridge, Mass.	7.30		-.6	0	-.1	-1.8	0	-1.2	-.9	1972	-.8	2.8							N.S.	- .7	-1.9	7.3
Lansing, Mich.	7.18					-.2	-.6	-1.1	-2.2*	1969	-.7	-1.8*	-1.4	-2.1*					N.S.	-1.0	-1.7	22.54
Racine, Wisc.	6.80							-1.1*	-.4*	1967	-.5	-.4	-.7*	-.8	-.1	-.9			N.S.	- .8	- .6	12.30
Tacoma, Wash.	6.50						-.7	-.7	-.3	1968	-1.4*	-.6*	-.9	-.9*	-.1				N.S.	- .6	- .7	9.44
San Bernardino, Calif.	5.10						-.9*	-.1	-.7	1970	-.8	-1.3	-.5						N.S.	- .9	-1.0	7.10
Minneapolis, Minn.	4.90			-.6	-.4	-1.5	-1.8*	-1.3	-1.0*	1971	-1.5	-1.3							N.S.	-1.0	-1.5	11.16
Waterbury, Ct.	4.80							-2.4	-1.3	1970	-.9	-1.7	-.5						N.S.	-1.9	-1.5	4.80
Rochester, N.Y.	4.30			-2.4	-2.5	-1.6	-3.0	-2.8	-2.4*	1971	-3.3	-3.1							N.S.	-2.4	-3.1	5.16
Seattle, Wash.	4.14		-1.0	-1.1*	-1.5	-.6	-.8*	-.9	-1.6	1971	-1.5	-1.1							N.S.	-1.0	-1.1	10.25
Dayton, Ohio	3.20								-.6	1969	-1.1	-1.4*	-2.0	-2.0					a	a	a	3.96
Buffalo, N.Y.	3.20									1967	-2.5	-4.0*	-1.3*	-1.3*	-1.2	-2.2			a	a	a	5.79
Warren, Ohio	2.80								-.5	1969	-.7	-.3	-.5	-.9					a	a	a	2.80
St. Paul, Minn.	2.57									1965		*	*		-1.0	-.5	.7	-.5	a	a	a	6.77
South Bend, Indiana	2.30				*			-1.3	-1.0	1970	0	-1.2	-.9			(less decline than expected)			N.S...05	-1.2	-1.0	5.80
Rockford, Ill.	2.40								.7	1969	.9	-1.3	-.6	-1.1					a	a	a	2.40
Flint, Mich.	2.39						-3.5	-1.5*	-2.0	1971	-2.9	-1.7*							N.S.	-2.3	-1.7	3.69
Syracuse, N.Y.	2.20						-2.6	-1.4	-1.7*	1967	-1.9	-1.8*	-1.7	-2.0	-1.7	-2.0*			N.S.	-1.9	-1.8	3.65

School District	Students Reassigned	Court Ordered	% White Students -7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Year	Major Plan Date	+0 Years	+1 Years	+2 Years	+3 Years	+4 Years	+5 Years	+6 Years	+7 Years	Signif. Level	Pre-Slope	Post Slope	Total Desegr.
Colorado Springs, Colo.	2.10							.4*	-.3	1971	-.1	-.2							a	a	a	2.30
Indianapolis, Ind.	2.02	yes			-1.3	-1.0	-.2	-1.4	-1.7	1970	-1.1	-1.9*	-1.7*						N.S.	-1.0	-1.8	3.06
New York, N.Y.	1.76				-2.0	-1.9	-1.8	-1.6	-2.2	1964	-2.6	-2.9*	-2.0*	-3.0*	-2.9*	-3.3*	-2.3*	-1.4	-1.3	.02,N.S.	-1.9	-2.5	7.67
Pittsburgh, Pa.	1.44							-.3	-.5*	1968	-1.7	-.5*	-.5*	-.4	-.8	-.8*			N.S.,.02	- .4	- .6	3.18
Toledo, Ohio	1.20								-4.3	1969	-.5*	.2	-1.0*	-.2					a	a	a	1.37
Waterloo, Iowa	1.91							-.6*	-.4	1971	-.6	-.4							a	a	a	2.25
Gary, Ind.	1.30									1967		-2.2	-1.6	-1.3	-2.4	-1.5*			a	a	a	1.64
Milwaukee, Wisc.	1.10		*			-.3	-2.4	-.3	-2.5	1972	-1.9								a	a	a	2.02
Louisville, Ky.	.83					-.9	-1.2	-1.0	-.5	1972	-2.2								a	a	a	.83
Des Moines, Iowa	.82							*	0*	1969	-.1	-.4	-.3	-.6					a	a	a	1.10
Los Angeles, Calif.	.66						.2*	-1.5	-1.8*	1971	-1.6	-1.5							a	a	a	1.56
E. St. Louis, Ill.	.29									1967		-3.7	-2.5*	-6.2	-4.3*	-4.4			a	a	a	.73
Kansas City, Mo.	.26					-2.4	-1.9	-2.7*	-1.6	1969	-1.8	-1.6	-1.9	-2.3*					N.S.	-2.2	-1.9	.44
Detroit, Mich.	.25					-4.5	-1.8	-1.9	-1.9	1967	-1.3	-1.9	-2.8	-2.0*	-1.2*				N.S.	-2.6	-2.1	.26
San Diego, Calif.	.19							-1.2	-2.0	1967	-5.6	.1	-.5	-.2	-.4	-1.3			N.S., .01	-1.6	- .4	.19
Chicago, Ill.	.17						-1.4	-1.4	-4.9	1968	-3.7	-1.6*	-1.5*	-2.0	-1.8*				N.S.	-2.4	-1.7	.46
Philadelphia, Pa.	.02		-2.0	-3.0	-1.0	-3.3	-1.4	-.9	-1.1	1972	-.1								a	a	a	.02
Hartford, Ct.	.01						-3.8	-3.7	-2.5	1968	-3.6	-4.7	-3.7	-1.9	-2.3				N.S.	-3.3	-3.8	.01
Control Group:																						
Akron, Ohio	0						-1.0	-1.0	-1.0	----	-1.0	-.7	-.9	-.5	-1.1					a	a	0
Albany, N.Y.	0								-3.1	----	-1.8	-2.2	-1.1	-2.1	-1.1					a	a	0
Albuquerque, N.M.	0									----		-1.3	-.3	-.5	-.4					a	a	0

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School District	Students Reassigned	Court Ordered	% White Students -7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Year	Major Plan Date	+0 Years	+1 Years	+2 Years	+3 Years	+4 Years	+5 Years	+6 Years	+7 Years	Signif. Level	Pre-Slope	Post Slope	Total Desegr.
Boston, Mass	0						-1.4	-.3	-1.5	-----	-3.9	-2.5	-1.9	-2.6	-1.9				.05, .01	-1.0	-2.2	0
Camden, N.J.	0									-----	-6.4	-2.7	-2.3	-2.8	-1.8				a	a	a	0
Charleston, W.Va.	0									-----	.1	-.2	0	-.1	.1				a	a	a	0
Cleveland, Ohio	0									-----	.2	-1.2	-1.0	.1	-.3				a	a	a	0
E. Orange, N.J.	0									-----	-4.7	-3.9	-3.2	-3.4	-2.6				a	a	a	0
Erie, Pa.	0									-----	-.3	-.7	-.6	-.2	-.9				a	a	a	0
Hamilton, Ohio	0									-----	-.2	-.2	.1	-.2	-.2				a	a	a	0
Jersey City, N.J.	0									-----	-3.9	-2.1	-2.9	-1.0	-2.0				a	a	c	0
Kansas City, Kansas	0									-----	-3.3	-1.6	-.9	-2.0	-1.7				a	a	a	0
Lima, Ohio	0									-----	-1.3	-1.5	-.5	-1.4	.6				a	a	a	0
Omaha, Neb.	0									-----	-1.3	-.6	-.1	-.5	-.6				a	a	a	0
Newark, N.J.	0							-3.0	-2.2	-----	-2.7	-2.9	-.9	-2.0					N.S.	-2.6	-1.5	0
Santa Monica, Calif.	0									-----	.1	-.6	-2.1	-.6	-.9				a	a	a	0
Trenton, N.J.	0									-----	-4.1	-2.2	-1.9	-1.8	-.9				a	a	a	0
Utica, N.Y.	0									-----	-1.3	-.6	-.7	-1.4	-.5				a	a	a	0
Washington, D.C.	0				-2.3	-1.9	-1.8	-1.4	-1.5	-----	-2.1	-.6	-.5	-.6	-.4				N.S.	-1.8	- .5	0
Portland Oregon	0						-.6	-.3	-.2	-----	-2.5	-.9	-.6	-.9	-1.1				.02, .01	- .4	- .9	0
Passaic, N.J.	0									-----	-7.8	-2.6	-3.7	-3.4	-2.4				a	a	a	0
Paterson, N.J.	0									-----	-3.8	-3.1	-3.9	-2.3	-1.5				a	a	a	0
Phoenix, Ariz.	0									-----	-1.4	-1.1	0	-1.2	0				a	a	a	0
Wilmington, Del.	0						-3.0	-2.3	-3.4	-----	-3.9	-7.1	-3.9	-1.3	-1.8				N.S.	-2.8	-3.3	0
Youngstown, Ohio	0									-----	-.1	-2.0	-1.4	.4	-1.6				a	a	a	0
Springfield, Ill.	0									-----	-.5	-1.1	- .5	- .4	-1.0				a	a	a	0

[a]Unable to compute.

92000

column is the double-Mood test. The significance level of .02 indicates that the post-major desegregation series is significantly different from what would have been expected from the previous trend. The next two columns indicate the characteristics of the slope of the pre-major desegregation series and the slope of the post-desegregation series. While both are negative, the post major desegregation series is slightly more negative. On the other hand, the return to a rate of decline of 2.5 clearly means a stabilization of white flight.

The second school district in the table, Pontiac, also has a significant increase in white flight after their major school desegregation plan. However, the decline stabilizes by the second year so that the rate is lower than any year before the desegregation. Furthermore, the post-desegregation slope is much less negative than the pre-desegregation slope. Both, Pontiac and Pasadena were court ordered, but as we shall see they are the only two, of the eleven court ordered school districts, that had a significant increase in white flight.

The remarkable characteristic of these data is that, of the ten school districts that implemented a significant degree of school desegregation, only two showed any significant increase in white flight. Of those two that showed white flight, there is some indication that other factors probably contributed to the white flight in one (Pasadena).[66] Additional research on Pontiac may turn up confounding factors as well. Of these top ten desegregating school districts, one of the few school districts in the entire sample to ever have an increase in the percentage white is represented here. By the third and fourth year after their 1968 desegregation, the percentage white in the Berkeley

school district actually increased by .2 percent and .9 percent respectively.

The next group of school districts, those implementing an intermediate degree of school desegregation, have not a single case of any school district exhibiting significant white flight after their major desegregation plan. In the next group of school districts, those that reassigned less than 5 percent of their black and white students in their major plan, one had less decline than would have been expected from the previous trend (South Bend, Indiana), and three others had a significant increase in white flight. However, these three exhibiting white flight implemented so little school desegregation that the relationship to school desegregation should be treated with suspicion. As in the previous analysis of voting behavior, the control group has been assigned a treatment point of 1968 which would come right after the 1968 summer riots and is also a year in which a good number of school districts implemented a major desegregation plan. Hopefully in this way, possible secular trends can be isolated. Unfortunately, the control group suffers from poor record keeping (in some cases because it was illegal to keep such data). However, of those school districts that had pre-1967 data, two show a significant increase in white flight after the summer of 1968. Other school districts show a large increase from the previous year, but without the pre-1967 data, it is impossible to tell if this is a change in the trend.

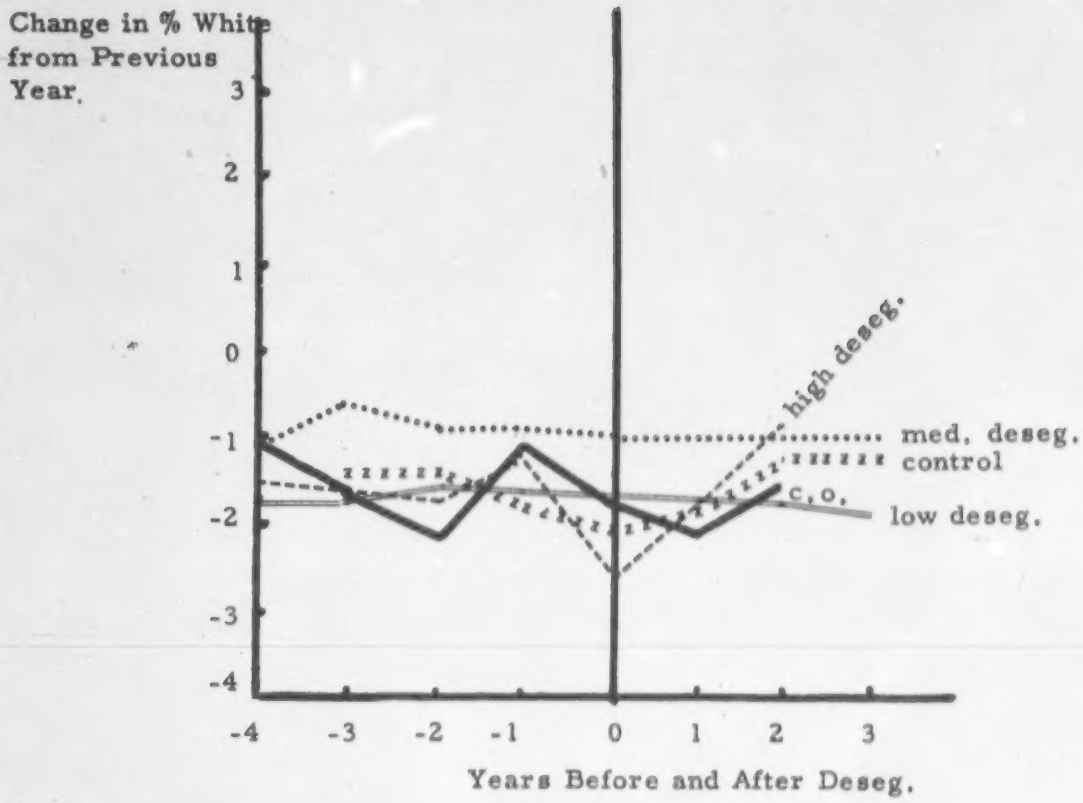

Figure 11: Change in Percentage White for Four Desegregation Groups and a Control Group

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Table 11

Change in Percentage White for Four Desegregation Groups and a Control Group

Group	Change in % White								Signif. Level	Pre-Slope	Post-Slope
	-4 Years	-3 Years	-2 Years	-1 Years	0 Years	1 Years	2 Years	3 Years			
Court Ordered	-1.1	-1.8	-2.2	-1.0	-1.8	-2.1	-1.4		N.S.	- .0	.2
High Desegregation (> 20%)	-1.5	-1.8	-1.8	-1.2	-2.4	-1.8	- .8		N.S.	.1	.8
Medium Desegregation (5 - 20%)	-1.1	- .7	- .9	- .9	-1.0	-1.0	-1.0		N.S.	.0	.1
Low Desegregation (< 5%)	-1.8	-1.8	-1.4	-1.5	-1.6	-1.6	-1.5	-1.7	N.S.	.1	- .1
Control Group (0)		-1.5	-1.5	-1.9	-2.2	-1.8	-1.3	-1.2	N.S.	- .5	.3

For those who like to see data summarized, the school districts are divided into five groups: court ordered, high desegregation (greater than 20%), medium desegregation (5 - 20%), low desegregation (less than 5%), and the control group. The average for each group for four years before their major plan and the four years after beginning with the year of the plan is presented in Table 11 and represented graphically in Figure 11. As Table 11 indicates, none of the various desegregating groups shows any significant white flight, although the highest desegregation group shows a negligable increase of about 1 percent from the previous trend.[67] After that, white flight stabilizes to a rate slightly better than the pre-desegregation period. One of the interesting sidelights of this study is that for all school districts, including those that did not desegregate, the rate of decline in percentage white has not increased at a faster and faster pace. In fact, while the decline continues, the rate of decline has slowed slightly.

The findings of this study are at complete odds with those of Coleman. It is the contention of this author (and numerous colleagues) that Coleman has pulled off one of the great swindles of public policy research. He writes: "the extremely strong reactions of individual whites in moving their children out of large districts engaged in massive and rapid desegregation suggests that in the long run the policies that have been pursued will defeat the purpose of increasing overall contact among races in schools."[68] This study, however,

shows with clear, verifiable data, that ther is little or no white flight as a result of school desegregation. Furthermore, although Coleman maintains that court ordered desegregation causes the greatest white flight, Table 11 shows no significant increase in white flight in northern court ordered school districts.

Table 12 shows the change in percentage white before and after school desegregation controlling for degree of desegregation and city size. Within each desegregating group and the control group, the larger cities show no greater white flight than the medium and small cities, and none is significant. Although Coleman maintains that the greatest white flight is in large school districts engaged in "massive and rapid desegregation," the two large school districts, San Francisco and Denver, that engaged in such massive and rapid desegregation show no significant white flight. Nor do most of the other large school districts that implemented lesser degrees of school desegregation (Seattle, Milwaukee, Kansas City, Mo., Indianapolis, Baltimore, Philadelphia, Los Angeles, and Chicago). Thus, Coleman has been wrong about every claim he has made regarding school desegregation and white flight.

Table 12

Change in Percentage White for Four Desegregation Groups and a Control Group Controlling for City Size

Group	-4 Years	-3 Years	-2 Years	-1 Years	0 Years	1 Years	2 Years	3 Years	Signif. Level	Pre-Slope	Post-Slope
Large Cities (> 500,000)											
High Desg.	-1.3	.7	-2.8	- .4	-2.3	-2.3	-1.4		N.S.	.1	.5
Med. Desg.	-4.0	-1.0	-1.1	- .9	-1.1	-1.1			a	a	a
Low Desg.		-1.5	-1.7	-3.6	- .8	- .9	- .4		N.S.	-1.1	.2
Control	-2.1	-1.3	-1.3	-1.9	-1.7	-1.6			N.S.	.1	a
Med. Cities (100,000 - 500,000)											
High Desg.	-1.3	-1.6	- .3	-1.3	-2.0	-1.8	-2.2	- .8	N.S.	.1	.3
Med. Desg.	- .8	-1.3	- .6	-1.2	-1.2	-2.1	-1.1	-1.1	N.S.	- .1	.1
Low Desg.	-1.3	-2.5	-1.8	-1.3	-1.3	-1.6	-1.4	-1.3	N.S.	.1	.0
Control		-1.0	-2.0	-2.1	-2.4	-1.8	-1.3	-1.3	N.S.	- .6	.4
Small Cities (< 100,000)											
High Desg.	-2.2	-3.3	-4.8	-1.8	-3.6	-1.2	-1.1		N.S.	- .0	1.3
Med. Desg.	- .2	- .7	-1.2	- .2	- .9	- .3	- .9		N.S.	- .1	0
Low Desg.			- .6	- .5	- .7	-1.5	-1.5		a	a	a
Control					-2.2	-1.9	-1.6	-1.2	a	a	a

[a] Unable to compute.

Although Coleman has claimed in television appearances and to journalists that he is conducting research on school desegregation policy, he is doing nothing of the sort. Indeed, there is no evidence he knows what school desegregation policy has been implemented in the school districts he is studying. The fact is that Coleman is studying change in school segregation and either he does not know the difference between that and school desegregation or does not care. (Either way does not speak well for his professional competence.) By simply measuring changes in school segregation (which is much easier than tracking down the data on school segregation policy), Coleman cannot distinguish between ecological succession in neighborhood school attendance zones and an actual identifiable governmental policy resulting in the same thing -- integration. In the case of ecological succession in school attendance zones, the integration will be temporary and the eventual re-segregation will look like white flight resulting from school "desegregation." This confusion of two different phenomena means that his model is invalid for the case of governmental or court ordered school desegregation policy. Unfortunately, he has made the case in interviews and on television, that it is valid for school desegregation policy and few reporters, citizens, and school board members know enough about the error in his research to understand the swindle.

The reason why so much data is included in this report is to keep the research findings presented here from becoming a "disagreement

between two social scientists." What is presented here is a disagreement between real data from the real world and Coleman's findings.[70] Clearly, it is Coleman who is wrong.

While the analysis presented here is only the beginning, it already shows at a very basic level that there is little or no white flight as a result of the implementation of school desegregation. There is, however, white flight to some degree in almost all school districts as a consequence of a secular trend (the exception is a high desegregation school district, Berkeley, California). What is encouraging is that in most desegregating school districts the rate of decline has either stabilized or actually improved. Furthermore, many of the school districts in the control group have also had their rate of decline stabilized.

This analysis hopefully shows that there are ways to present quantitative data so that it is clear, understandable, and verifiable. In the case of a sensitive social policy, this is perhaps the only method that is justifiable.

GENERAL CONCLUSIONS

The two analyses presented in this paper of a sample of northern school districts and the impact school desegregation has had on them, are only preliminary. Even so, they indicate that school desegregation does not have the deleterious effect on community social integration that seems to be commonly expected. School desegregation increases voting turnout, while not necessarily increasing dissent. Even when dissent increases, as it does in lower educational level school districts,

it is inly temporary, and seldom, if ever, results in the rescinding of a plan. Furthermore, scho ol desegregation rarely results in significant white flight. When it does seem to increase the decline in percentage white, it is a temporary phenomena. Indeed, for the high desegregating school districts the rate of decline by th e end of the third year tends to be much lower than any other group. While one cannot jump to the conclusion that school desegregation has increased social integration by the third year after the major desegregation plan, the opposite conclusion is not warranted either. All in all, the data show some cause for optimism.

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Appendix 1

Percentage White in Public Schools Before and After the Major School Desegregation Plan

School District	% Students Reassigned	Court Ordered	% White Students -8 Years	-7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Year	Major Plan Date	% White Students 0 Year	1 Years	2 Years	3 Years	4 Years	5 Years	6 Years
Pasadena, Calif.	98.48	yes		71.6	68.9	67.4	65.5	63.4	61.4	59.0	1970	54.8	50.3	47.8				
Pontiac, Mich.	83.47	yes		74.7	73.4	72.4	69.4	66.3	64.6	62.2	1971	56.8	56.4					
Berkeley, Calif.	57.72					54.0	51.8	49.6	50.3	48.7	1968	46.5	45.9	45.1	45.2	46.1		
Wichita, Kansas	44.36				86.5	85.7	85.3	84.9	83.9	82.9	1971	81.6	80.2					
San Francisco, Calif.	42.49	yes			45.3	42.4	41.2	41.2	37.1	36.9	1971	35.9	31.8					
Ft. Wayne, Indiana	34.60				87.6	87.2	86.7	85.1	84.9	83.8	1971	83.0	82.0					
Waukegan, Ill. (el. schools)	31.72	yes				88.7	87.4	83.9	76.1	75.0	1968	73.2	71.3	70.2	69.2	67.3		
Denver, Colo.	24.64	yes				70.4	69.1	67.7	66.2	65.6	1969	64.1	61.7	60.3	58.3			
Providence, R.I.	24.10										1967	80.5	78.5	78.7	78.5	76.8	75.8	
Riverside, Calif.	21.40							84.6	83.9	83.3	1966	81.8	80.6	81.5	79.3	78.3	76.9	75.4
Las Vegas, Nevada	19.24	yes				83.7	84.0	83.4	82.8	82.8	1972	82.0						
Evansville, Indiana	15.77	yes	94.4	94.3	94.0	91.8	91.5	91.4	91.2	90.9	1972	90.2						
Muncie, Indiana	15.10					88.7	89.0	88.1	85.5	87.4	1972	87.1						
Stamford, Ct.	13.20				84.8	82.2	80.9	80.1	78.3	76.5	1970	75.0	74.1	72.6				
Niagara Falls, N.Y.	11.76							83.5	83.1	82.5	1970	81.2	80.7	80.0				
Sacramento, Calif.	11.10	yes							68.8	67.5	1966	65.3	66.5	66.2	65.2	64.1	63.0	62.0
Oklahoma City, Okla.	10.82	yes						83.1	80.9	79.8	1968	78.2	73.3	72.1	71.7	70.1		
Saginaw, Mich.	9.60					61.7	59.1	58.6	58.0	55.7	1972	53.5						
Grand Rapids, Mich.	9.40									79.1	1968	76.0	75.2	74.9	73.1	70.9		
Springfield, Mass.	9.10					84.1	82.3	80.5	81.4	77.7	1968	76.4	74.5	71.8	69.6	67.6		

School District	% Students Reassigned	Court Ordered	% White Students -8 Years	-7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Years	Major Plan Date	% White Students 0 Years	1 Years	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years
Ann Arbor, Mich.	9.00								94.0	93.5	1965	93.4	93.3	92.4	90.1	89.5	88.7	87.6	86.4
Lexington, Ky.	8.91										1967	82.5	82.7	82.7	82.3	82.0	81.6		
Baltimore, Md.	7.92			48.2	41.2	39.9	35.9	34.9	33.8	32.9	1971	31.8	30.7						
Tulsa, Oklahoma	7.83	yes		88.5	88.4	88.2	87.8	83.0	82.9	82.3	1971	81.8	79.9						
Peoria, Ill.	7.83									82.5	1968	81.7	80.8	79.8	78.7	77.3			
Cambridge, Mass.	7.30		85.2	84.6	84.6	84.5	82.7	82.7	81.5	80.6	1972	79.7	81.7						
Lansing, Mich.	7.18					87.6	87.4	86.8	85.7	83.5	1969	82.8	81.0	79.6	77.5				
Racine, Wisc.	6.80							86.6	85.5	85.1	1967	84.6	84.2	83.5	82.7	82.6	81.7		
Tacoma, Wash.	6.50						90.3	89.6	88.9	88.6	1968	87.2	86.6	85.7	84.8	84.7			
San Bernardino, Calif.	5.10						67.9	67.0	66.0	65.3	1970	64.5	63.2	62.7					
Minneapolis, Minn.	4.90			92.8	92.2	91.8	90.3	89.3	88.0	87.0	1971	85.5	84.2						
Waterbury, Ct.	4.80							77.8	75.4	74.1	1970	73.2	71.5	71.0					
Rochester, N.Y.	4.30			77.1	74.7	72.2	70.6	67.6	64.8	62.4	1971	59.1	56.0						
Seattle, Wash.	4.14		87.2	86.2	85.1	83.6	83.0	82.2	81.3	79.7	1971	78.2	77.1						
Dayton, Ohio	3.20								62.1	61.5	1969	60.4	59.0	57.0	55.0				
Buffalo, N.Y.	3.20									67.4		64.9	60.9	59.6	58.3	57.1	54.9		
Warren, Ohio	2.80								77.9	77.4	1969	76.7	76.4	75.9	75.0				
St. Paul, Minn.	2.57										1965				90.7	89.7	89.2	88.9	88.4
South Bend, Indiana	2.50							84.6	83.3	82.3	1971	82.3	81.1	80.2					
Rockford, Ill.	2.40								86.3	87.0	1969	87.9	86.6	86.0	84.9				
Flint, Mich.	2.39						65.0	61.5	60.0	58.0	1971	55.1	53.4						
Syracuse, N.Y.	2.20						87.9	85.3	83.9	82.2	1967	80.3	78.5	76.8	74.8	73.1	71.1		

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School District	% Students Reassigned	Court Ordered	% White Students -8 Years	-7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Years	Major Plan Date	% White Students 0 Years	1 Years	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years
Colorado Springs, Colo.	2.10							83.5	83.9	83.6	1971	83.5	83.3							
Indianapolis, Ind.	2.02	yes			70.2	68.9	67.9	67.7	66.3	64.9	1970	63.8	61.9	60.2						
New York, N.Y.	1.76				66.8	64.8	62.9	61.1	59.5	57.3	1964	54.7	51.8	49.8	46.8	43.9	40.6	38.3	36.9	35.6
Pittsburgh, Pa.	1.44							63.3	63.0	62.5	967	60.8	60.3	59.8	59.4	58.6	57.8			
Toledo, Ohio	1.20								75.1	70.8	1969	70.3	70.5	69.5	69.3					
Waterloo, Iowa	1.91							87.8	87.2	86.8	1971	86.2	85.8							
Gary, Ind.	1.30										1967	31.2	29.0	27.3	26.0	23.6	22.1			
Milwaukee, Wisc.	1.10					73.3	73.0	70.6	70.3	67.8	1972	65.9								
Louisville, Ky.	.83					54.7	53.8	52.6	51.6	51.1	1972	48.9								
Des Moines, Iowa	.82								91.2	91.2	1969	91.1	90.7	90.4	89.8					
Los Angeles, Calif.	.66						53.5	53.7	52.2	50.4	1971	48.8	47.3							
E.St. Louis, Ill.	.29										1967	32.1	28.4	25.6	21.4	17.1	12.7			
Kansas City, Mo.	.26					61.8	59.4	57.5	54.8	53.2	1969	51.4	49.8	47.9	45.6					
Detroit, Mich.	.25					53.6	48.1	46.3	44.4	42.5	1967	41.2	39.3	36.5	34.5	33.3				
San Diego, Calif.	.19							84.8	83.6	81.6	1967	76.0	76.1	75.6	75.4	75.0				
Chicago, Ill.	.17						49.1	47.7	46.3	41.4	1968	37.7	36.1	34.6	32.6	30.8				
Philadelphia, Pa.	.02		48.0	46.0	43.0	42.0	38.7	37.3	36.4	35.3	1972	35.2								
Hartford, Ct.	.01						55.2	51.4	47.7	45.2	1968	41.6	36.9	33.2	31.3	29.0				
Control Group:																				
Akron	0						78.0	77.0	76.0	75.0	----	74.0	73.3	72.4	71.9	70.8				
Albany, N.Y.	0								73.8	70.7	----	68.9	66.7	65.6	63.5	62.4				
Albequerque, N.M.	0										----	59.9	58.6	58.3	58.8	57.4				

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School District	% Students Reassigned	Court Ordered	% White Students -8 Years	-7 Years	-6 Years	-5 Years	-4 Years	-3 Years	-2 Years	-1 Years	Major Plan Date	% White Students 0 Years	1 Years	2 Years	3 Years	4 Years	5 Years
Boston, Mass.	0						75.6	74.2	73.9	72.4	----	68.5	66.0	64.1	61.5	59.6	
Camden, N.J.	0									36.1	----	31.7	29.0	26.7	23.9	22.1	
Charleston, W.Va.	0									93.4	----	93.5	93.3	93.3	93.2	93.3	
Cleveland, Ohio	0									42.3	----	42.5	41.3	40.3	40.4	40.1	
E. Orange, N.J.	0									25.1	----	20.4	16.5	13.3	9.9	7.3	
Erie, Pa.	0									86.8	----	86.5	85.8	85.2	85.4	84.5	
Hamilton, Ohio	0									89.9	----	89.7	89.5	89.8	89.6	89.4	
Jersey City, N.J.	0									47.9	----	44.0	41.9	39.0	38.0	36.0	
Kansas City, Kansas	0									71.2	----	67.9	66.3	65.4	63.4	61.7	
Lima, Ohio	0									77.1	----	75.8	74.3	73.8	72.4	71.8	
Omaha, Neb.	0									81.3	----	80.0	79.4	79.3	78.8	78.2	
Newark, N.J.	0							26.0	23.0	20.8	----	18.1	15.2	14.3	12.3	12.3	
Santa Monica, Calif.	0									79.2	----	79.3	78.7	76.6	76.0	75.1	
Trenton, N.J.	0									33.0	----	28.9	26.7	24.8	23.0	22.1	
Utica, N.Y.	0									88.4	----	87.1	86.5	85.8	84.4	83.9	
Washington, D.C.	0				16.6	14.3	12.4	10.6	9.2	7.7	----	5.6	5.0	4.5	3.9	3.5	
Portland, Oregon	0						93.1	92.5	92.2	92.0	----	89.5	88.6	88.0	87.1	86.0	
Passaic, N.J.	0									55.2	----	47.4	44.8	41.1	37.7	35.3	
Paterson, N.J.	0									42.0	----	38.2	35.1	31.2	28.9	27.4	
Phoenix, N.J.	0									66.7	----	65.3	64.4	64.4	63.2	63.2	
Wilmington, Del.	0						42.9	39.9	37.6	34.2	----	30.3	23.2	19.3	18.0	16.2	
Youngstown, Ohio	0									56.0	----	55.9	53.9	52.5	52.9	51.3	
Springfield, Ill.	0									90.2	--	89.7	88.6	88.1	87.7	86.7	

FOOTNOTES

[1] Peter H. Rossi, "Community Social Indicators," in The Human Meaning of Social Change, ed. Angus Campbell and Phillip Converse (New York: Russell Sage Foundation, 1972).

[2] Jean A. LaPonce, "Experimentation and Political Science: A Plea for More Pre-Data Experiments," (paper presented at the meeting of the International Political Science Association, Vancouver, Canada, 1970), p. 9.

[3] Carl I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies," American Psychologist, XIV (January, 1959), 8-17.

[4] L. A. Wilson II and L. Harmon Zeigler, "Elite-Mass Studies: A Monte Carlo Investigation of Possible Method Bias," paper presented at the annual meeting of the American Political Science Association, Chicago, Illinois, September 1974, pp. 13-14.

[5] James S. Coleman, "Recent Trends in School Integration," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., April 2, 1975.

[6] Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Co., 1963, pp. 47-48.

[7] In a 1968 study of 88 school districts in the U.S., Jennings and Zeigler found about 23% of the districts had no ballot opposition at all, and 44% had not had an incumbent defeated in the past several elections. M. Kent Jennings and Harmon Zeigler, "Response Styles and Politics: The Case of School Boards," Midwest Journal of Political Science, 15 (May, 1971), 290-321.

[8] David J. Kirby, T. Robert Harris, and Robert L. Crain, Political Strategies in Northern School Desegregation (Lexington, Mass., D. C. Heath and Co., 1973), p. 125.

[9]Minar, however, found that higher social status communities have lower levels of electoral participation because they have lower levels of conflict and greater conflict management skills. Alford and Lee's study of special municipal elections also showed a negative correlation between voting turnout and educational level. However, both studies were conducted in the early 1960's before school desegregation became an issue in higher status communites. David Minar, "The Community Basis of Conflict in School System Politics," American Sociological Review 31 (December, 1966), p. 827; Robert R. Alford and Eugene C. Lee, "Voting Turnout in American Cities," American Political Science Review, 62 (September, 1968), pp. 796-813.

[10]Robert L. Crain and Donald B. Rosenthal, "Community Status as a Dimension of Local Decision-Making," American Sociological Review, 32 (December, 1967), p. 972.

[11]Seymour Martin Lipset, Political Man, (Garden City, New York: Doubleday Anchor, 1963), p. 185. A few of the many well known works supporting this view are: Bernard R. Berelson, Paul F. Lazarsfeld, and William N. McPhee, Voting: A Study of Opinion Formation in a Presidential Campaign, (Chicago: The University of Chicago Press, 1954), pp. 314-323; Herbert McCloskey, "Consensus and Ideology in American Politics," American Political Science Review 68 (June, 1964), 361-382.

[12]The irony of Lipset's assertion is indicated by recent Boston city elections for parent multiracial councils to oversee school desegregation. Anti-busing groups correctly saw the councils and participation in them as aids to the successful implementation of school desegregation and social integration of the community. Therefore, white voters in South Boston and Charleston were warned not to vote in the elections. Anti-busing demonstrators picketed the election sites and distributed flyers charging that parents who voted for biracial councils would be traitors to their community. The result was a very light turnout, but it was hardly an indication of "the decline of major social conflicts." Boston Globe, July 16, 1975, p. 1.

[13]John M. Orbell and Toru Uno, "A Theory of Neighborhood Problem Solving: Political Action vs. Residential Mobility," American Political Science Review, 66 (June, 1972), pp. 471-489. Much of their theory is based on Albert Hirschman's work on decline in organizations and the response of individuals to this decline. Albert O. Hirschman, Exit, Voice, and Loyalty: Response to Decline in Firms, Organizations, and States (Cambridge: Harvard University Press, 1970).

[14]That school desegregation, or "busing" as it is often called, is increasingly unpopular nationally is substantiated by public opinion polls. By 1972, according to a Harris Poll, only 25 percent of whites were willing to bus their children (to integrate a school) even if ordered to do so by a court.)

[15]Orbell and Uno, p. 480.

[16]In about half the school districts in this sample, recall elections are legal and could be used, as in Detroit, to defeat incumbents. However, recall elections are rarely held even where they are legal because they require so much organization: the acquisition of a certain percentage of the voters' signatures on a petition and the scheduling of a special election or fulfillment of the requirements to get on the ballot in the next regularly scheduled election.

[17]The relationship between the percentage of a plan which is mandatory and the percentage of students reassigned is .94 for white students and .77 for black students using Gamma.

[18]Crain and Rosenthal, op. cit., p. 980.

[19]The findings on the relationship between educational level and support for school finance referenda have been contradictory at the aggregate level. Three studies have found a positive relationship between educational level and voter support in finance referenda while three studies have found a negative relationship. Those finding a positive relationship are: Crain and Rosenthal, Ibid.; Harlan Hahn and Timothy Almy, "Ethnic Politics and Racial Issues: Voting in Los Angeles," The Western Political Quarterly, 24 (December, 1971), 719-730; and Minar, "The Community Basis of Conflict in School System Politics." Those finding negative relationships are: Stephen T. McMahon, "Demographic Characteristics and Voting Behavior in a Junior College Creation, Tax Levy and Bond Issue Election," Ph.D. dissertation, University of Texas, 1966; George W. Davidson, "The Relationship of Selected Factors to the Success or Failure of School Tax Referenda," Ph.D. dissertation, University of Illinois, 1967; and Wilson K. Jordon, "An Analysis of the Relationship between Social Characteristics and Educational Voting Patterns," Ed.D. dissertation, University of California, Los Angeles, 1966. Part of the reason for the contradictions may be the difficulty of partialling out at the aggregate level the countervailing effects of percentage black which correlates positively with support on financial referenda, but is negatively related to median educational level.

[20]See Robert E. Agger and Marshall N. Goldstein, Who Will Rule the Schools: A Cultural Class Crisis, (Belmont, Calif.: Wadsworth Publishing Company, Inc., 1971), p. 53; Frederick M. Wirt and Michael W. Kirst, The Political Web of American Schools, (Boston: Little, Brown and Company, 1972, p. 101.

[21]See Peter H.Rossi and and Robert L. Crain, "The NORC Permanent Community Sample," The Public Opinion Quarterly, 32 (Summer 1968), pp. 261-272 for a description of the PCS sample. A tape containing the most important variables from four PCS studies can be obtained from the University of Michigan's ICPR archive.

[22]All but two of the 70 school districts in this study have the same name and virtually the same boundaries as the city. The decision to desegregate in every case involves interaction between city and school officials and citizens of both legal entities. The result is that for most practical purposes the distinction between city and school district is almost nonexistent.

[23]Studies using other measures have been: Donald R. Matthews and James W. Prothro, "Stateways Versus Folkways: Critical Factors in Southern Reactions to Brown v. Board of Education," in Essays on the American Constitution, ed. Gottfried Dietze (Englewood Cliffs, N.J.: Prentice-Hall, 1964): James W. Prothro, "Stateways Versus Folkways Revisited: An Error in Prediction," Journal of Politics, 34 (May, 1972), pp. 352-364; Robert L. Crain, Morton Inger, Gerald McWhorter, and James J. Vanecko, The Politics of School Desegregation (New York: Anchor Books, 1969), all using a dichotomous variable: did or did not desegregate. Kirby, Harris, and Crain, Political Strategies in Northern School Desegregation, using a qualitative measure of the characteristics of the plan. U.S. Commission on Civil Rights, Racial Isolation in the Public Schools, 2 vols. (Washington: U.S. Government Printing Office, 1967); Thomas Dye, "Urban School Segregation, A Comparative Analysis," Urban Affairs Quarterly, 4 (December, 1968) pp. 141-165, both using a measure of the percentage of black students in predominantly black schools. Reynolds Farley and Alma F. Taeuber, "Racial Segregation in the Public Schools," American Journal of Sociology 79 (January, 1974), pp. 888-905, using the index of dissimilarity adapted from the Taeuber index of residential segregation. The most recent study uses a measure of the change in the proportion of minority students attending "ethnically balanced" schools from 1966 to 1971: Eldon L. Wegner and Jane R. Mercer, "Dynamics of the Desegregation Process: Politics, Policies, and Community Characteristics as Factors in Change," in The Polity of the School, ed. Frederick M. Wirt (Lexington, Mass.: D.C. Heath, 1975), pp. 123-143.

[24]Other minorities, such as Asians, Spanish surname, and Indians have been excluded from the computation of this measure because the concern of this study is with the political pressures and responses to the segregation of blacks from whites. Nonblack minorities simply do not exert the same kinds of pressures nor arouse the same fears as blacks. Indeed, even in many western school districts where their proportions are larger than in other regions, nonblack minorities have often sided with the white majority against desegregation. Therefore, desegregation plans have tended to be overwhelmingly focused on integrating blacks into white schools.

[25]Racial composition data was obtained from the U.S. Department of Health, Education, and Welfare, Directory of Public Elementary and Secondary Schools in Selected Districts, Fall 1970, Enrollment and Staff by Racial/Ethnic Group, (Washington, D.C.: U.S. Government Printing Office, 1971). There are also volumes for Fall 1967, Fall 1968. Data for desegregation claimed in earlier years was obtained from published records of the school districts themselves. A more detailed explanation of the computation of this measure can be found in Christine H. Rossell and Robert L. Crain, Evaluating School Desegregation Plans Statistically (Baltimore: The Johns Hopkins University Center for Metropolitan Planning and Research, 1973), pp. 4-11, or Chapter 12: "Measuring School Desegregation," in Kirby, Harris, and Crain, Political Strategies in Northern School Desegregation.

[26]The two measures are so highly correlated (.80) that to avoid problems of mullicollinearity in the mutliple regression equations, they were combined.

[27]Most school districts hold school board elections every other year and tax referenda only sporadically. This is discussed later in more detail.

[28]Originally it was planned to turn each one of these categories into dummy variables for the computation of the multiple regression equations. The small N, however, necessitated keeping the weighting scheme. For a dicussion of ways of overcoming a small N, including weighting, see Sanford I. Labovitz "Methods for Control with Small Sample Size," American Sociological Review, 30 (1965), pp. 243-249.

[29]Campbell and Stanley, Experimental and Quasi-Experimental Designs for Research, pp. 35-71; Donald T. Campbell and H. Laurence Ross, "The Connecticut Crackdown on Speeding: Times Series Data in Quasi-Experimental Analysis," (1968) in The Quantitative Analysis of Social Problems, ed. Edward R. Tufte (Reading, Mass.: Addison-Wesley Publishing Company), pp. 110-125.

[30]However, the mean values of various social and political characteristics computed for each election sub-sample in each year show very little difference from year to year. Thus, the fact that cases are not always represented does not seem to affect the fundamental characteristics and stability of the "average case" when they are divided into a control group and a desegregating group.

[31] The two tests, plus an additional test are described in Joyce Sween and Donald T. Campbell, "The Interrupted Time Series as Quasi-Experiment: Three Tests of Significance," Evanston: Northwestern University, 1965, (mimeographed). The same paper describes a computer program which has three tests of significance, the single-Mood test, the double-Mood test, and the Walker-Lev tests, in addition to calculating autocorrelation. The computer program is distributed by the Vogelback Computing Center of Northwestern as NUC 0049 Timex.

[32] Alexander M. Mood, Introduction to the Theory of Statistics, (New York: McGraw-Hill, 1950), pp. 297-298.

[33] Mood, Introduction to the Theory of Statistics, pp. 350-358; Helen Walker, and J. Lev, Statistical Inference, (New York: Holt, Rhinehart, and Co., 1953), pp. 390-400.

[34] An underlying assumption of these tests is that there is no autocorrelation (correlation of errors). Since it rarely happens that errors are uncorrelated in longitudinal studies, Sween and Campbell have determined through Montecarlo simulation, the degree of adjustment necessary in the significance level at which one should reject the null hypothesis for various levels of autocorrelation. Sween and Campbell, "The Interrupted Time Series..," pp. 11-17; Joyce Sween and Donald T. Campbell, "A Study of the Effect of Proximally Autocorrelated Error on Tests of Significance for the Interrupted Time Series Quasi-Experimental Design," Evanston: Northwestern University, 1965,(mimeographed).

[35] Furthermore, if only those school districts that desegregated in 1968 or after are analyzed, the change in voter turnout becomes significant at the .10 and .15 level.

[36] The choice of educational level as a measure of social status was based primarily on the fact that this variable behaved most consistently and was the easiest to understand and explain. However, it is only fair to note that the relationship between social status and school board election dissent fluctuates according to what measure of social status is used. Income tends to have no relationship whatsoever with board election dissent. A factor analysis index of income, education, and occupation also had no relationship. An index created by multiplying income times education showed a weak positive relationship. This index was used in an earlier analysis undertaken by the author in which only the post-1967 period was examined cross-sectionally. At that time it had a much stronger positive relationship (.32) because of the

difference in analysis technique. Numerous other studies have also found variations in relationships depending on the particular measure of social status used, with income and education most likely to behave differently. Howard Hamilton, "Voting Behavior in Open Housing Referenda," in Political Attitudes and Public Opinion, ed. Dan B. Nimmo and Charles M. Bonjean (New York: David McKay Company, Inc., 1972); McMahon, "Demographic Characteristics and Voting Behavior in a Junior College Creation, Tax Levy, and Bond Issue Election"; Richard F. Carter and W. Lee Ruggels, The Structure and Process of School-Community Relations, (Stanford, California: Stanford University School of Education, 1966).

[37]The fourth rival hypothesis can be discarded as highly improbable given the nature of the election data and the low probability of election scoring changes occurring because of desegregation.

[38]The preliminary analysis of white flight is presented in the second half of this paper.

[39]The decline after the first year cannot be explained by the fact that one does not have to keep on defeating incumbents once those responsible for the decision have been thrown out. This explanation is invalid because only half of the sample held elections in the first year after desegregation, (the other half holding them in subsequent years) and of these not all their incumbents were up for reelection. To rid a desegregating school board of all its incumbents by means of regularly scheduled elections can take anywhere from two to three elections representing a six to nine year period.

[40]Crain and Rosenthal, "Community Status as a Dimension of Local Decision-Making," p. 972.

[41]Minar, "The Community Basis of Conflict in School System Politics," James S. Coleman, Community Conflict (New York: The Free Press, 1957).

[42]Troy V. McKelvey, "A Cooperative Study of Voting Behavior in Two Coterminous Systems of Local Government," Ph. D. dissertation, University

of California, Berkeley, 1966; John van Schoonhoven and Wade N. Patterson, A Comparative Study of Inconsistent Voter Behavior in School Budget Elections, Eugene, Oregon: Oregon School Study Council, School of Education, University of Oregon, 1966; George Gallup, How the Nation Views the Public Schools, Princeton, N.J.: CFK/Ltd., Gallup International, 1969; James Q. Wilson and Edward C. Banfield, "Political Ethos Revisited," American Political Science Review, 65 (December 1971), pp. 1048-1062.

[43]William L. Boyd, "Community Status and Suburban School Conflict," in The Polity of the School, ed. Frederick M. Wirt, (Lexington, Mass.: D.C. Heath and Co., 1975), pp. 103-121.

[44]The aggregate analysis conducted by Banfield and Wilson was James Q. Wilson and Edward C. Banfield, "Public Regardingness as a Value Premise in Voting Behavior," American Political Science Review, 58 (December 1964), pp. 876-887. The individual level analysis which essentially supported the aggregate relationship between income and education on the one hand, and political ethos on the other, is Wilson and Banfield, "Political Ethos Revisited," p. 1052. However, no attempt was made to determine if an area or city has the ethos of the individuals that predominate in number. Lineberry and Fowler argue that the influence of an attitude on the political culture of a city cannot be inferred from the number of persons who hold it. Robert L. Lineberry and Edmund P. Fowler, "Reformism and Public Policies in American Cities," American Political Science Review, 61 (September 1967), pp. 701-716.

[45]While there seems to be no study that has addressed itself to the question of the voting behavior of highly educated individuals on school tax referenda or other school elections in low status school districts, there has been research that shows the city or environment one lives in has an effect on an individual's behavior and attitudes. See Howard Schuman and Barry Gruenberg, "The Impact of City on Racial Attitudes," American Journal of Sociology, 76 (September 1970), pp. 213-261; John M. Orbell, "The Impact of Metropolitan Residence on Social and Political Orientations," (1969) in Political Attitudes and Public Opinion, ed. Dan D. Nimmo and Charles M. Bonjean, (New York: David McKay Company, Inc., 1972), pp. 424-438; Howard D. Hamilton, "Voting Behavior in Open Housing Referenda," in Political Attitudes and Public Opinion, ed. Dan D. Nimmo and Charles M. Bonjean, (New York: David McKay Company, Inc. 1972), p. 517.

[46]Both school board election dissent and degree of school desegregation are rather skewed by extreme values and a large number of cases scoring

zero. Therefore, all regression analysis of these two variables was performed on a logarithmic transformation to the base 10 (adding 1 to all cases to eliminate zeros). A logarithmic transformation preserves the rank ordering of the cases but pulls the extremely large values in toward the middle of the scale and spreads the smaller values out in comparison to the original, unlogged variables. This shift toward a symmetrical distribution better fulfills assumptions that form the basis of statistical significance testing in a regression model. For a discussion with practical examples, see Edward Tufte, Data Analysis for Politics and Policy (Englewood Cliffs: Prentice-Hall, 1974), pp. 108-131.

[47]There has been a good deal of disagreement over the usefulness of using variance explained as a test of the relative strength of variables. In a criticism of Equal Educational Opportunity (the Coleman Report) Cain and Watts argue that variance explained is totally inappropriate as a test of relative strength for the purposes of informing policy choices. Glen G. Cain and Harold W. Watts, "Problems in Making Policy Inferences from the Coleman Report," in Evaluating Social Programs, ed. by Peter H. Rossi and Walter Williams (New York: Seminar Press, 1972), p. 78. In this study, however, variance explained is used only in conjunction with the Beta in assessing the relative importance of two variables in separate, but otherwise identical equations.

[48]Normally one would not have to control for other variables to uncover spurious relationships in the quasi-experimental time series analysis because a case is compared to itself at each point in time. As mentioned several times, this particular election data violates that assumption and thus controls might possibly rule out a finding obtained earlier.

[49]A Chow's F test was performed between each pair of equations to see if there was a significant difference between the equation in the year before the major plan and the equation in the year after the major plan. There was a significant difference. Unfortunately, there was also a signficant difference between every other paired equation. Clearly, election phenomena are too unstable from year to year for the F test. Gregory C. Chow, "Tests of Equality Between Sets of Coefficients in Two Linear Regressions," Econometrica, 28 (July, 1960), pp. 591-605.

[50]The variable used in this study, updated from that used by Kirby, et al., consists of the number and duration of sit-ins, demonstrations, and boycotts that occurred during and after major demands for school desegregation and the intensity of public support for the action that attracted the largest number of people. This data is computed separately for each school year before and after the major desegregation plan.

[51]School Board Racial Liberalism is computed from an attitudinal questionnaire administered to four members of the 1968 school board in each city. The "liberal" response was to be in favor of integration, sympathetic to civil rights movement tactics and goals, and in favor of government intervention on behalf of the black civil rights movement. The data is still useful for this study because the 1968 school board members were on the board for most of the period from 1968-71. Very few school districts desegregated before 1968. (The construction of this scale is described in detail in Kirby, et al., p. 222 under the heading School Board Liberalism-Conservatism Scale.)

[52]Robert R. Alford and Eugene C. Lee, "Voting Turnout in American Cities," American Political Science Review 62 (September, 1968), pp. 796-813.

[53]Coleman, Community Conflict; Minar, "The Community Basis of Conflict in School System Politics"; Charles L. Willis, "Analysis of Voter Response to School Financial Proposals," Public Opinion Quarterly 31 (Winter 1967-68), pp. 648-651; Robert J. Goettel, "The Relationship between Selected Fiscal and Economic Factors and Voting Behavior in School Budget Elections in New York State," a paper presented at the American Educational Research Association, Annual Conference, New York City, February 4, 1971; Maurice Pinard, "Structural Attachments and Political Support in Urban Politics: The Case of Fluoridation Referendums," American Journal of Sociology, 68 (March 1963), pp. 513-526.

[54]Clarence Stone, "Local Referendums: An Alternative to the Alienated-Voter Model," Public Opinion Quarterly, 29 (Summer 1965), p. 215.

[55]Richard F. Carter and William G. Savard, Influence of Voter Turnout on School Bond and Tax Elections, Cooperative Research Monograph, No. 5 (Washington, D.C.: Government Printing Office, 1961).

[56]Frederick M. Wirt and Michael W. Kirst, The Political Web of American Schools, (Boston: Little, Brown and Co., 1972), pp. 104-108.

[57]Hamilton, "Voting Behavior in Open Housing Referenda," pp. 526-527.

[58]The fact that blacks and black areas are more supportive of school tax referenda and school spending than whites has been fairly well documented.

Ralph V. Smith, et al., Community Support for the Public Schools in a Large Metropolitan Area, Ypsilanti, Michigan: Eastern Michigan University, 1968; Hahn and Almy, "Ethnic Politics and Racial Issues: Voting in Los Angeles"; Wilson and Banfield, "Public-Regardingness as a Value Premise in Voting Behavior"; Wirt and Kirst, The Political Web of American Schools, pp. 102-104.

[59]Christine H. Rossell, "School Desegregation and Electoral Conflict," in The Polity of the School, ed. Frederick M. Wirt, (New York: D.C. Heath and Co., 1975), pp. 49-64.

[60]The third year may show a negative relationship because of the nature of the variable--it is a measure of the liberalism of the 1968 school board. By the third year after desegregation, there may be so few of these racially liberal school board members left on the board that a negative relationship appears because the variable reflects an earlier board. Why the first year before desegregation should also have a negative relationship is not clear.

[61]This may be a function of measurement error in this variable, particularly with regard to the exact chronological occurrence of the civil rights activity. Respondents could have placed it later in time than it actually was.

[62]Coleman, "Recent Trends in School Integration."

[63]Charles Clotfelter, "The Detroit Decision and 'White Flight,'" (College Park, Md., 1974).

[64] Everett Cataldo, Michael Giles, Deborah Athos, and Douglas Gatlin, "Desegregation and White Flight," Integrated Education (January 1975), pp. 3-5. The compliance/rejection status of their respondents was determined from official school records. Compliers were defined as those parents who had a child attending public school in both 1971-72 and 1972-73. Rejecters were those who had a child in public school in 1971-72, but transfered the child to private school in 1972-73. The eight county school districts were Dade, Palm Beach, Duval, Leon, Jefferson, Escambia, Manatee, and Lee.

[65]Since the index represents the percentage of black students reassigned to white schools, and the percentage of white students reassigned to black or formerly black schools, the index could go as high as 200 percent. However, reassigning 100 percent of each race is not very efficient. The most efficient reassignment in a perfectly segregated system is 50 percent of each race. Because school districts also have political and social considerations, they tend to avoid reassigning whites to black or formerly black schools, and thus the index usually reflects the percentage of black students reassigned to white schools. Pasadena is one of the few school districts that reassigned a large proportion of white students to black or formerly black schools. Either they did more reassignment than was "efficient," or there is some measurement error in the index.

[66]Wirt points out that although Pasadena's white (Anglo) student population declined after school desegregation, two districts in the San Gabriel Valley (the hot, smoggy valley that Pasadena is located in) that did not desegregate lost even more whites than Pasadena. Frederick M. Wirt, "Understanding the Reality of Desegregation," (Berkeley, California, June 21, 1972).

[67]The school districts were also grouped according to their total desegregation, rather than their largest action. This made little difference in the trend for each group, although the highest desegregating group showed even less change in white flight.

[68]Coleman, "Recent Trends in School Integration," p. 21.

[69]Ibid., p. 21-22.

[70]Reynolds Farley of the University of Michigan's Institute for Population Studies is currently analyzing HEW racial composition data and has also found no statistically significant white flight as a result of school integration.